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GROWTH AND CONSTRAINT IN COLLEGE STUDENTS, A STUDY OF THE VARIETIES OF PSYCHOLOGICAL DEVELOPMENT. FINAL REPORT.

BY- KATZ, JOSEPH, ED.
STANFORD UNIV., CALIF., INST. FOR STUDY OF HUMAN

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THIS WAS A LONGITUDINAL STUDY WHICH FOCUSED ON THE PERSONALITY DEVELOPMENT OF COLLEGE STUDENTS BETWEEN THE AGES OF 17 AND 22. IN THE FALL OF 1961, SELECTED STANFORD AND BERKELEY FRESHMEN WERE ADMINISTERED SIX SCALES FROM THE OMNIBUS PERSONALITY INVENTORY, THE AUTHORITARIAN AND ETHNOCENTRISM SCALES, AND AN EXPERIMENTAL 54-ITEM DRINKING ATTITUDES SCALE. AS SENIORS, THEY WERE ADMINISTERED THE SAME INSTRUMENTS AND A QUESTIONNAIRE. THE HEART OF THE STUDY CONSISTED OF THE LONGITUDINAL INTERVIEWING OF SELECTED STUDENT SAMPLES THROUGHOUT THEIR FOUR COLLEGE YEARS. A WIDE VARIETY OF PATTERNS EMERGED, AND THESE ARE DESCRIBED. THE RESULTS, IN ROUGH SUMMARY, ARE--(1) FOR MANY STUDENTS, THE ACADEMIC-INTELLECTUAL OFFERINGS OF THE COLLEGE DO NOT CONNECT ADEQUATELY WITH THEIR OWN MOTIVATIONS AT THE EXPENSE BOTH OF ADEQUATE LEARNING AND OF PERSONAL INVOLVEMENT IN THE PROCESS OF INTELLECTUAL INQUIRY, (2) MANY STUDENTS DO NOT LEARN ADEQUATELY TO RELATE THEIR REASONING CAPACITIES WITH PROBLEMS THEY FACE IN THEIR OWN DEVELOPMENT, AND (3) THE COLLEGE YEARS DO NOT BRING SUFFICIENT OPPORTUNITY TO DEVELOP THE NON-INTELLECTIVE PARTS OF THEIR CHARACTER. THE CHAPTERS IN THIS VOLUME ARE CENTERED ABOUT THESE MAJOR AREAS--(1) ACADEMIC EXPERIENCE, (2) CAREER PREPARATION AND CHOICE, (3) PEER RELATIONS, AND (4) PERSONALITY DEVELOPMENT. THE LITERATURE ON PERSONALITY DEVELOPMENT DURING COLLEGE IS REVIEWED AND RECOMMENDATIONS ARE MADE. (PS)

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August 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Joseph Katz, Ph.D., Editor

Editorial Board: Joseph Katz, Ph.D.
Harold A Korn, Ph.D.
Max M. Levin, Ph.D.

August 1967

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Stanford University
Institute for the Study of Human Problems

Stanford, California

CONTENTS

Preface iv

Introduction 1

OVERVIEW OF CHANGES DURING THE COLLEGE YEARS

I. A Portrait of Two Classes: The Undergraduate Students at Berkeley and Stanford From Entrance to Exit — Joseph Katz, Ph.D. 7

Appendix: The Senior Questionnaire 81

II. Personality Scale Changes From the Freshman to the Senior Year — Harold A. Korn, Ph.D. 122

TWO INDIVIDUAL CASE STUDIES

III. Case Study: The Forces of Development and Constraint in the Boy's Situation — Peter Madison, Ph.D. 156

IV. Case Study: The Girl's Situation: A House Divided — Peter Madison, Ph.D. 212

RESPONSES TO THE ACADEMIC CURRICULUM

V. Student Differences in the Response to the Curriculum - The Open, The Straight, and The Narrow — Harold A. Korn, Ph.D. 253

VI. The Incomplete Liberalizing Impact of Higher Education: Case Studies of Two Pre-Medical Students — Harold A. Korn, Ph.D. 279

DIFFERENCES BETWEEN DIFFERENT LIVING GROUPS

VII. Personality Differences and Residential Choice — Marjorie Lozoff, M.A., ACSW 294

THE OCCUPATIONAL CHOICE

VIII. Careers: Choice, Chance, and Inertia — Harold A. Korn, Ph.D. 373

Contents (cont.)

DEFENSE AND IMPULSE IN DEVELOPMENT

IX. Congruence and Developmental Changes in Authoritarianism in College Students
Max M. Levin, Ph.D. 422

X. Drinking and Personality
Nevitt Sanford, Ph.D.
Susan Singer, Ph.D. 472

XI. Students Who Seek Psychiatric Help
Ving Ellis, M.D. 510

ACTIVIST STUDENTS AND THEIR SUPPORTERS

XII. Personality Characteristics of Students Arrested During the Berkeley Sit-In of 1964
Joseph Katz, Ph.D. 569

XIII. The 1966 Student Body President Elections at Stanford
Barry Sokolik, M.A. 600

LITERATURE REVIEW

XIV. Review and Discussion of the Literature on Personality Development During College
Susan Singer, Ph.D. 606

RECOMMENDATIONS

XV. Recommendations for Policy and Philosophy
Joseph Katz, Ph.D. 631

Analytic Table of Contents 660

PREFACE

The Student Development Study has been a longitudinal study of college students at the University of California at Berkeley and at Stanford University. It has been jointly sponsored by the Department of Psychiatry of Cowell Memorial Hospital at the University of California under the direction of Saxton Pope, M.D. and, since 1964, of Harvey Powelson, M.D., and by the Institute for the Study of Human Problems, Stanford University, under the direction of Nevitt Sanford, Ph.D. The cooperation of Henry B. Bruyn, M.D., Director of the Berkeley Student Health Service, is gratefully acknowledged. Mr. John Moore, Administrator of Cowell Hospital organized the elaborate arrangements of freshmen testing at Berkeley in 1961.

The entering freshmen in the fall of 1961 at Berkeley and Stanford were administered a personality inventory which was repeated in the spring of 1965 when these students were interviewed twice a year throughout their college career. The plan of the study is described in the Introduction.

The Student Development Study was supported by the U. S. Office of Education (Cooperative Research Project Number 5-0799) and the Danforth Foundation. The Study has been under the direction of Joseph Katz, Ph.D.

The following have served as members of the senior research staff. (Members of the staff who have interviewed students throughout the four college years, 1961-1965, are marked with an asterisk.)

Elizabeth Alfert, Ph.D.*
Ving Ellis, M.D.*
Louise Farnham, Ph.D.
Mervin Freedman, Ph.D.
Richard Fresco, Ph.D.
Mary C. Jones, Ph.D.*
Joseph Katz, Ph.D.*
Harold A. Korn, Ph.D.
Max M. Levin, Ph.D.*
Marjorie Lozoff, M.A., ACSW*
Peter Madison, Ph.D.
Magoroh Maruyama, Ph.D.
Robert Mogar, Ph.D.
Saxton Pope, M.D.
Nevitt Sanford, Ph.D.
Susan Singer, Ph.D.
Robert Suczek, Ph.D.*
Carl Thoresen, Ph.D.
Carl Wells, M.D.

The following were research assistants:

James Andrews
Ronald Baker
Katherine Baker
John Bauer
Joan Grusec
Mallory Jones
Paul Kanzer
Thomas Kibler
Nanci Moore
Dana S. Power
Susan Roberts
Barry H. Sokolik
Ronald Starr
John Stelzer
Fred Strassburger
Rupert Wilkinson

The following were secretaries to the Study:

Joan Castle
Phyllis Gardiner
Aileen Govan
Linda Horn
Shelagh Hyner
Mallory Jones
Sharon Kingery
Bridget Read
Susan Roberts
Margaret Taylor

Saxton Pope and Nevitt Sanford were the two principal co-investigators. The planning of the Study was done while Joseph Katz was a research associate in the Department of Psychiatry at Cowell Memorial Hospital and owes much to the inspiration and psychological views of Saxton Pope. The Student Development Study is a direct outgrowth of the Mellon research program at Vassar College under the direction of Nevitt Sanford. The present Study had the continuing benefit of Nevitt Sanford's superb command of psychological theory and his understanding of the dynamics of personality development and educational processes.

In 1964 the Counseling and Testing Center at Stanford--directed by John D. Black, Ph.D.--became a cooperating institution with the Student Development Study and its research director, Harold A. Korn, became a leading member of the research staff.

A special gratitude is expressed for their help and cooperation to the Berkeley Computation Center for the earlier years of the Study and to the Stanford Computation Center for the later years.

The current volume was prepared under the editorship of Joseph Katz with the constant cooperation of Harold A. Korn and Max M. Levin.

Stanford, California
August, 1967

Joseph Katz, Ph.D.

INTRODUCTION

The data collection of the Student Development Study began in the fall of 1961 when nearly the entire entering freshman class at Stanford (N=1303) and nearly two-thirds* of the entering freshman class at Berkeley (N=2014) were administered six scales from the Omnibus Personality Inventory and the Authoritarian and Ethnocentrism Scales (all described in Chapter II). In addition, they were given an experimental 54-item Attitudes to Drinking Scale (described in Chapter X). These scales were re-administered early in 1965 to over half of the students who had taken the tests as freshmen and were still in school. (See Chapter II concerning the representativeness of the senior samples.)

In addition to the Personality Inventory, the students in 1965 were also asked to respond to a 19-page Questionnaire. This Questionnaire was based on the experience of intensive four-year interviewing and was intended to help determine the generalizability of the results obtained in the interviews. The Senior Questionnaire is described and discussed in Chapter I.

The heart of the Study consisted in the longitudinal interviewing of selected student samples throughout their four college years. The interviewees were selected at random after being classified into five major categories and separated by sex so that half of the selected students were men and half were women. Seventy-five percent of the students were selected in accordance with their responses on the Social Maturity (SM) and Impulse Expression (IE) scales. One-third were high (one standard deviation or more above the mean) on both scales, one-third were at or near the mean, and one-third was low (one standard deviation or more below the mean). The remaining 25% were equally divided between those who were (1) high on SM and low on IE and (2) low on SM and high on IE.

A total of 274 students were asked to participate in our interview program. At Stanford only 4 out of 110 students refused initially to participate and three of these were subsequently interviewed. Two students at Stanford refused to continue with the Study after one and four interviews respectively. At Berkeley 7 out of 164 students refused initially to participate and three additional students agreed to participate but did not show up for their first interview. (Eight of these ten students dropped out of school subsequently.) Twenty-four refused to continue after one through four interviews. (Fifteen of these dropped out of school.) It was made clear to all participants in the test and interview sessions that their cooperation was voluntary. They were also assured the confidentiality of the information they communicated to us.

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*Because of the large numbers of entering freshmen at Berkeley, students were assigned at random to different testing sessions spread out in many different sections over several days. By mistake some testing sessions were scheduled at the same time with required college events. Otherwise the number of students tested by us would have been still higher.

The rationale of selecting students according to their responses to the SM and IE scales which have some independence of each other (correlating about 0.45) was to obtain three groups of students who differed in their possession of such ego characteristics as flexibility, autonomy, capacity for relationship and differed simultaneously in the degree of their imaginativeness and impulsivity. The underlying theoretical assumption was that development and education differ according to the degree to which the individual can utilize his impulses in his strivings for competence, instead of having more or less to defend himself against them. Differently put, we hoped to obtain in our high scorers people in whom the reality and the pleasure principles cooperated with each other rather than being isolated from or even antagonistic to each other. As a number of the reported analyses in this volume bear out, people who scored high on SM and IE did have a livelier career through college, a more active, aware, and sensitive reaction to their college experiences and the people in their environment. (Sometimes the high scorers had too much impulse and particularly, too much conflict to integrate so that at the end of college their future is uncertain and eventual integration not clearly in sight.) Many people in the middle group (represented, for instance, in the long case histories in Chapters III and IV) have also moved steadily if less pronouncedly towards a re-structuring of their lives, a better use of their potentialities and a more effective utilization of their environment. The people who scored low on SM and IE tended towards a more passive and routine attitude to themselves and their environment. They are a problem group in spite of the fact that many of them are not likely to rock the boat of the educational and other institutions in which they find themselves.

The focus of our Study was on personality development between the ages of 17 and 22. But as all development takes place in a social context we paid full attention to as many aspects of the students' environment as we could. Thus, in our interviewing we aimed particularly to obtain information about their responses to (1) their teachers and courses, (2) their peers, (3) their parents, (4) their campus living groups and other formal and informal organizations, and we attempted to trace (5) the development of their moral, religious, and political values. We interviewed the students twice each year and these interviews extended from often not much more than one hour in the freshman year to three hours or more for many in the senior year. We obtained information about what had been the individual student's experiences in the interval between interviews and we obtained information about the five areas of these dropped out of school.) It was made clear to all participants in the test and interview sessions that their cooperation was voluntary. They were also assured the confidentiality of the information they communicated to us.

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Interview #1 focused on the transition from home and high school to college.

Interview #2 focused on parents and upbringing at home.

Interview #3 focused on the use of the summer when the student was not under the direct control of the college.

Interview #4 focused on the student's moral, religious, and political values.

Interview #5 focused on his academic experience (courses and teachers).

Interview #6 focused on peer relations and sexual development.

Interview #7 focused on self-concept and perception of change in one's self.

Interview #8 focused on a final assessment on the college years and the special experience of being interviewed.

The picture that emerges from our Study and is described in the chapters of this volume is that of a wide variety of patterns in which individuals react to and develop during the college years. The college environment is a highly controlling one and it is so to the point of stress for many students. But some individuals have the psychological equipment not to let the formal and informal requirements of the structure interfere with their own individual development and they can utilize both the opportunities and even the obstacles of their environment for the purpose of their own growth. At the other extremes are those whose needs for passivity, for being told what to do have become so ego-syntonic that the comfort of orderly security does not make them experience requirements as either stressful or inhibiting. In between are the bulk of people whose lives never reach an adequate expression of their potential because they are handicapped by (1) inadequate self-awareness and inadequate self-assertion and, (2) an environment whose demands and constrains are both not sufficiently elicitive of their potential and too thwarting to their sponaneity.

The results, in rough summary, are that

(1) For many students the academic-intellectual offerings of the college do not connect adequately with their own motivations at the

expense both of adequate learning and of personal involvement in the process of intellectual inquiry.

(2) Many students do not learn adequately to connect their reasoning capacities with problems they face in their own development. Major life decisions such as occupational or marital choices, as well as minor ones, are made without sufficient utilization of the perspective which intellect and awareness can bring. The consistent encouragement of abstract thinking, at the expense of more exposure to experience and of bringing into the open of deeply felt emotions, leave the student with insufficient practice in the art and science of applying thought to the clarification of feelings and to decision-making.

(3) For many students the college years do not bring sufficient opportunity to develop the non-intellective parts of their character. The development of more autonomous identity, of the capacity of intimate communication with other people, and of taking responsibility for others is not brought to the fruition that most students implicitly desire but do not know without further educational help - *how* to bring about.

The college years bring many difficult psychological tasks and problems. Separation from home and parents, confrontation with a wide variety of peers, and higher standards of academic performance create insecurities and a questioning of one's powers and identity. Older problems and feelings, often dating back to childhood, are revived once more and many students find themselves more or less consciously struggling with derivatives of earlier feelings of narcissism or of omnipotence or of passive dependency. At the same time, there are the demands of new roles that the student is about to fill and that call for greater social, sexual, and occupational maturity. The tasks are so staggering that many individuals let some or most of them go by default and institutions rarely address themselves in sufficient detail to the problems of how they might help their students to cope with these many-fronted tasks and problems. (Effective education during the college years may well depend on the degree to which the student can do justice to his various tasks *simultaneously*.)

These generalizations are among the conclusions that emerge from our Study and that are reported in the chapters of this volume. Our Study, like many other longitudinal ones, faced the problem of an abundance of data, the sheer copiousness and essential interrelatedness of which might make one despair of adequate analysis and reporting - and hence the not uncommon fact of such studies remaining unreported. We realized that we could not - short of taking many years of writing - report all or most of what may be presented of our data. The present volume, in spite of its size, is therefore more representative than it is comprehensive. Different members of the staff have made different forays, with different methods and research styles, into our three kinds of data: interviews, psychological scales, questionnaire. Choices had to be made all along as to what to exclude and what to include. Sometimes just time was the factor. For instance, it was hoped to discuss residential arrangements for our four main groups (Stanford men, Stanford women, Berkeley men, Berkeley women). But just to analyze the data for the Stanford men required all the time available.

Nevertheless, the selection of topics is not miscellaneous. The chapters in this volume report about the major areas of (1) academic experience, (2) career preparation and choice, (3) peer relations, (4) personality development. Besides this topical representativeness there is methodological representativeness too in that the chapters range from analyses of single individual cases to analyses of group responses in the questionnaire and personality inventories.

The volume begins with two chapters attempting to give an overview of the passage through college of the entering freshmen at Berkeley and Stanford. The first chapter bases itself primarily on the questionnaire responses of the students when they were seniors, while the second chapter describes personality scale changes during the four college years, attempting an analysis of the data that goes beyond considering only changes in mean scores. Chapters III and IV offer case studies of a male and a female student who scored near the mean on the SM and IE scales. They present a detailed picture of the slow, uneven, disrupted, and partial processes of development and search for identity during the four college years. The next two chapters take up the students' responses to the academic curriculum and show both how different students react differently to the same curriculum and how certain curricular arrangements interfere by the means they employ with their own explicit goals. Chapter VII reports on the variety of cultures represented among the different residences of Stanford men and the psychological differences among the different living groups. Chapter VIII describes the psychological dimensions behind the statistics that state the percentages of students going on to graduate and professional school or entering the work world.

Chapters IX and XI attempt to trace the psychological dynamics of three different kinds of "problems" frequently found in college student populations. Chapter IX addresses itself to the fate during college of authoritarianism - a rather insidious disposition towards closed-mindedness and scape-goating. Chapter X reports personality correlates of different types of drinking behavior and discusses integrative and non-integrative aspects of drinking. Chapter XI, in addition to reporting the reasons for students seeking psychiatric help and describing the course of their treatment also indicates how psychiatric intervention may be viewed as part of the educational process, an aid to growing, not medicine for the "sick." Chapters XII and XIII report on the student activists, exploring the psychological characteristics of the activists and trying to ascertain some of the reasons for their support among majorities of students. The review of the literature in Chapter XIV aims to inform about other work and to place our Study in the context of others concerned with personality development. The final chapter draws recommendation for policy that may be gathered from our work; it is by no means exhaustive of the many ideas that a study such as ours can yield for educational practice.

We like to view our Study as one contribution to the overarching task of the social sciences as being a self-reporting of society to itself. This possibility of reporting, in methodological ways, its own processes and the opportunity to build up theory that reveals the dynamics of these processes mark off our society from all previous ones. In the field of education there still is too much "empirical quackery," that is, indulgence in practice without sufficient articulation of what is done and without sufficient attempts to build up concepts and theories by which effects can be described, differentiated, and evaluated. We do not know whether our educational "herbs" cure, poison, or leave things where they are; we do not know for whom they do what, and we do not know what ingredients do what and how they do it. The authors would be most happy if our volume marks a small step forward in the direction of remedying this situation.

It finally remains to be said that the Student Development Study has generated several satellite projects. The two largest ones of these are the study of dropouts at Berkeley reported by Robert Suczek and Elizabeth Alfert under the title of Personality Characteristics of College Dropouts (U.S. Office of Education, Corporative Research Project Number 58232), and the study of teacher behavior and teaching effectiveness in an introductory humanities course under the direction of Harold A. Korn and Joseph Katz.

JK

Chapter I

A PORTRAIT OF TWO CLASSES: THE UNDERGRADUATE STUDENTS AT BERKELEY AND STANFORD FROM ENTRANCE TO EXIT, 1961-1965

Joseph Katz, Ph.D.

The Senior Year Questionnaire

This chapter is based on the responses to the Senior Questionnaire (reproduced in the Appendix). This questionnaire was administered early in 1965 to about 1000 seniors at Berkeley and Stanford all of whom had been given a personality inventory when they entered these universities in 1961, and this inventory was re-administered at the same time with the questionnaire. The questions were based on our intensive interview experience with about 250 students over four years and covered some of the same ground. Part of the purpose of the questionnaire was to give our results more generalized scope.

The questionnaire covered the major areas we had investigated in the interviews: personality developments; attitudes to courses and teachers; peer relations; extra-academic activities; values and ideology; relation to parents. It would have furnished us data for interesting comparisons if we had been able to give a similar questionnaire to our entering students in 1961. But several instruments help us to bridge that gap somewhat. Series of questions about values, age when people are happiest, attitudes to drinking and alcoholism were included in 1961 and repeated in 1965. We also obtained responses to a second values list from the Stanford freshmen of 1962 and repeated this list in 1965. Moreover, analyses of groups of items from our personality inventory has furnished us with further information about development or changes between 1961 and 1965. Finally, in the Senior Questionnaire the students are frequently asked for retrospective reports of changes or development.

Questionnaires are hazardous instruments as the same question can have quite different meaning to different people. One can narrow the range of meaning by asking further questions, but this at the expense of breadth of coverage. We have been much helped in interpreting the Senior Questionnaire by the wealth of detail we have accumulated on the same question in our interviews. There is only an occasional quote from the interviews in this chapter, but their presence is pervasive.

For the analysis we separated our students into four main groups: Berkeley men, Berkeley women, Stanford men, Stanford women. In what follows it is to be assumed that unless indication to the contrary is given, the results for the four groups are similar. On the whole we found fewer differences between Stanford and Berkeley than we expected. There are differences in social background, academic preparation and aptitude when the two student bodies are compared en masse. Stanford students seem to have an edge over Berkeley in sociability and social sophistication; this difference may be due to about 15% of the students at Berkeley who come from less sophisticated backgrounds. But, in general, the similarities of responses between Stanford and Berkeley are more striking than the differences

Before we proceed to a detailed report of the results of the questionnaire, we will very briefly consider some theoretical questions concerning change and development.

Change, Continuity and Development in Personality

How do students change in college? Our study has shown us that fewer students than one might expect report or are concerned with change. Thus only about one third of the men and close to one half of the women in our questionnaire samples say that they have changed much in personal characteristics since they entered college and even fewer say they have changed much in their moral, religious and political views.

What in the interviews strikes one about many students is the relative passivity with which they view life. Their coming to college has for many not been a deliberate choice but a matter of course. When asked what their occupational plans are, students say that their parents leave that choice up to them, yet upon probing it becomes clear that they are strongly influenced by their parents' wishes and aspirations as well as by the prevailing fashions and opportunities in the society. By the end of the senior year students are heading towards various schools and professional training. But probing reveals that further schooling is viewed by many as an opportunity for finding stimulation and achieving commitment there. It seems that for many there never will be a clear-cut decision, but that each step, channeled by educational and other social institutions, gradually determines the "decision" for them.

Nevertheless changes do take place during the college years: Students learn to make certain decisions without seeking permission from parents. They learn to regulate their own time, their own money. Starting from an original position of rather undifferentiated dating and distance in heterosexual relationships they move towards closer relationships and towards the assumption of the marital role. They express their own impulses more freely and are more able to pursue their own desires. At the same time they lessen previous constrictive and restrictive controls over their own impulses and adopt more tolerant and permissive attitudes towards the behavior of others.

What has just been said describes in varying degrees changes in nearly all students studied by us. It may be considered a part of normal maturation. Such maturation may be heavily influenced by the social setting and social expectations: Society considers certain tasks and performances, such as leaving home, greater freedom of expression, assumption of marital or occupational roles appropriate to certain ages or stages in people's careers. Normal maturation must be distinguished from more profound alternations of character, i.e., more or less major relocations of the psychological systems, e.g., of id, ego and superego, in their relations to each other. For instance, a student may move towards the adoption of the role of husband without any profound change in his dependency reactions, transferring them from the home to the college to the marriage. By contrast, a student who moves towards greater psychological autonomy, e.g., replacement of self-punitive demands with task-minded and and pleasure-giving work in an occupation of his own choosing, would have undergone change in a more profound sense.

When we speak of development these two meanings of change are often confused. Both normal maturation and profounder character changes constitute development. ("Change" strictly speaking is a more general term as a person can change, e.g., in his political affiliation, without this indicating either maturation or character alternation. Change also can denote direction opposite from development, as in regression.) Normal maturation does not take place without psychological efforts, and wherever people cannot assume the usual marital, occupational and other social-psychological roles, the presence of a more or less disabling pathology may be expected. (The assumption of these roles is, however, no guarantee against pathology.) Profounder alterations of character are a function of factors in the environment more unusual than an individual would normally encounter and a function of greater psychological effort within the person--whether that effort is analytic-aware, or through more intense and open relations with other people, or through mobilization of intuitive-aesthetic capacities.

When we started our current research the distinction between the two kinds of changes was not clear to the author. Perhaps because of a too idealistic reading of Erikson's developmental time table[1] the author expected more profound alterations of character to be a more frequent occurrence among our interviewees than it turned out to be. We postulated for at least a fourth or third of the students several conscious and more or less sharply defined identity crises, in their relations to themselves, their parents, peers, and other authorities, in their study and work patterns, all this eventuating in a redefinition of their character. This did not turn out to be the case. Moreover, often students who did experience crises and conflicts did not move towards the postulated resolution, at least by the time of graduation. While some of them may achieve such resolution within a longer time span, I would not make such a prognosis confidently for many of them on the basis of their behavior during the college years which suggests rather the likelihood of a lifelong pattern of conflict.

Instead of dramatic changes we did, however, find changes confined to some segment of the character, e.g., a more adequate self-conception or a lessening of previous masochistic tendencies in relationships with others. This experience has led the author to questioning his own original assumption of dramatic changes for the age span that we studied. Perhaps this is all one ought to expect for any period of life, except for the first few years. Beyond childhood profounder changes may only come slowly--an implicit lesson for our educational institutions, which often are too much in a hurry. It also may be that our present educational set-up is not sufficiently supportive of beneficial characterological changes--a theme that will be frequently taken up in this volume.

The term "development" also may suggest normative or valuational judgments. Such judgments need not be subjectivistic. Our conception of development includes such "markers" as increase in autonomy, relatedness, complexity and differentiation of character. Such factors may be necessary conditions for the human organism to achieve dynamic equilibrium within itself and with its environment. Whether such equilibrium has been achieved is capable, though not always easily so, of being put to objective test after the empirical criteria have been defined. The search of norms must, however, include, as in the present study, a recognition of human diversity and, possibly, conceptual ordering of human behavior into "types."

Students come to college with a great variety of agenda. Some come with a desire to define their own identity. Others come with a desire to acquire the skills, occupational or social, that will allow them to acquire a functional competence in the world. Still others come because that is the thing to do during these years; they seek acceptance by their environment and are less concerned with scrutinizing their environment than to be liked. Still others approach college as one more burdensome task imposed on them by society; they obey reluctantly and gripe when they can.

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[1] Erikson, Erik H. Growth and Crises of the Healthy Personality. Identity and the Life Cycle, New York: International Universities Press, 1959.

If one probes deeply enough, one will find doubts and uncertainties in everyone about the roles, controls and restrictions into which life, i.e., previous environments, have cast them. Even the most rigid express some dreams of escape, often into doing nothing or some passive euphoria. Others engage in phantasies of a prolonged motoric state; for instance, leading the life of a car racer. Almost everyone, even the freshmen who had just entered college, said that if they did not have to be in college they would like to travel--the most common motoric phantasy. A longing for profound transformation seems to live in nearly every human soul. But on a day to day level many of our students seem to have decided many years ago that this was out of their reach and they seem to have settled for a more restricted responsiveness to stilumi, seeking security by finding out what the rules of the game are and by playing accordingly. Those who chafe against restrictions and who battle the rules have not necessarily found a way to peaceful integration. Only some, in some areas, have found the avenues towards either modification of their own selves or of aspects of the environment that permit a greater unfolding of their potentialities and greater scope for expression and differentiation of their impulses and desires. Our study has not impressed us that the skills of men to further their own happiness are in a particularly advanced state.

Students' Perception of Changes

We now return to the Senior Questionnaire. In what follows we will report the results together with comments and interpretations. Report and comments will be distinguished typographically. Our first topic is the students' perception of changes within themselves. The Senior Questionnaire contained a series of open-ended questions.[2] One of these asked "How have you changed since the fall of 1961?"[3]

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[2] The students' open-ended responses were coded in accordance with a coding manual developed by Nanci I. Moore and checked for reliability.

[3] SQ 58 This and subsequent references are to the Senior Questionnaire (SQ) as numbered in the appendix to this chapter.

Roughly one third of those who responded made statements which fell into a category we coded as "more self-confidence, poise, independence." This category was defined in our coding manual as including "a feeling of independence, of improved social skills and leadership ability as well as self-confidence per se; and willingness to express and stand up for one's beliefs." Less frequently, but still relatively often, students also described themselves as more stable and as having achieved self-understanding, a better defined philosophy and interests, better emotional control, ability to face limitations, self-criticism, and self-satisfaction. Next in frequency they report changes in their awareness of others, better relationships with people or greater tolerance of their behavior or convictions. Next they say that they have changed in the direction of increased intellectual activity and curiosity (See Table 1).

Table 1

How have you changed since the fall of 1961?

	Stanford		Berkeley	
	Men	Women	Men	Women
	(Percentages*)			
More self-confidence, poise, independence	26	41	29	35
More stable	27	31	13	18
Increased self-awareness, self-understanding	18	21	13	22
More awareness of others and better relationships	13	27	17	28
More liberal and tolerant	20	25	24	38
Increased intellectual activity and curiosity	13	16	13	12

* Some students gave more than one response and these have all been included in the present computation. The picture is not substantially different if only the first response is counted.

It is worth noting that the students' spontaneous productions have a strong egocentric slant. Uppermost in their own minds is their own self-improvement and greater independence. In doing so they actually conform to the social system; for the college primarily rewards, by grades and other incentives, their attempts at self-improvement and it puts verbal, though not necessarily operational emphasis, on independence and originality. At the same time the students' sense of greater self-confidence and independence also reflects inner psychological changes.

Both psychological and social factors are reflected also in their reporting better relations with and greater tolerance of others. Psychologically they have moved in varying degrees to greater comfort with and responsiveness to other people, having been part challenged and part aided by the heterogeneity of the people they have encountered in college. At the same time, though it sounds somewhat paradoxical, greater conformity during the college years actually requires a greater amount of tolerance of others, because of the need to adjust to a wide variety of peers. This is rather dramatically illustrated in the case of conservative students when they confront what seem to them majority liberal sentiments. Liberal feelings go against their own grain and yet they feel pressure to accept them; at least they feel less sure of their own views. It is difficult, therefore, to disentangle a broadening of attitudes and greater closeness to people from the learning of the arts of accommodation.

The relatively low frequency with which an increase in intellectual activity and curiosity is mentioned introduces a theme to which we will often return: In the student's own mind other aspects of his development loom larger than the academic or even the intellectual requirements and opportunities of the college years. "Education" seems only secondarily to be the education of the mind.

Two contrasting statements from the senior year of two male interviewees will illustrate the students' own perceptions of how they have changed. The first one is from a student who underwent much development during college. Asked how he was different as a senior from what he was when he entered college, here are some samples of what he said:

> "I was probably less concerned with the academic sort of things. I was more concerned with having a good time, with going out, getting drunk...I always felt myself independent whether I was or not. The image had really nothing to do with reality. I'm more independent now for a viewpoint...when I first came here I had the confidence of ignorance...just

> coming to college is enough to make anyone lose their confidence. By now my confidence is starting to come back. By the end of last year I discovered that I can do things better than anyone else and that I'm really basically able... I doubt people more now...the thing that I valued most was being in a position of power, being a leader, an organizer. Now the thing I value most is being able to solve problems...I'm more of an idealist now. I'm concerned with the equality of opportunity, I'm willing to go to bat for ideas... [My principles] probably are a little more strict now than they were then. Then my views were just empty. I was free in a sort of anarchistic way."

This student illustrates considerable growth due to his acquiring true competence which allowed him to find meaning in problem-solving activities rather than more primitive release of impulse. At the same time he worked through some of his narsiccism and power striving, though traces of them are still very visible. He reports more strictness in the way in which he controls his behavior. Many other students report the opposite, a relaxation in strictness. But they refer to the liberalization of the harsher or more punitive aspects of their superego, while this student refers to the growth of realistic and task-oriented ego controls. When asked what accounted for the changes in him, this student mentioned the proofs he received of his academic ability; his exposure to different points of view and different people in the university community; his forming an intimate relation with a girl which cut him from the "carefree," less responsible standards of his former peer group--knowing anyone well, knowing his girl's"views on religion, everything, gives you a ball to bounce your views against and can change yours."

The following are the statements of a student who in his interviewer's judgment, in his test scores, and in a self-report had changed little. (The following are excerpts from the interviewer's record, rather than a completely verbatim transcript from the tape.)

> "I should have changed more from the experience. I was not sure then about my goals, and I'm not sure now." He gained, he said, a wider perspective on what is going on in the world. When he came, he was not interested in reading Time Magazine, now he is. "I definitely feel more independent...When I came here I thought completely along the lines of my parents...I am probably less close to people. I have trouble to

> find a common bond. Perhaps because people have changed more than I have. They are more experienced in different things. I have not become that interested in different things." He had not changed much in his freedom to do things. "I was not prepared for the freedom: study when you want, etc., etc." He had not changed much in his principles. "I never had any great goals in my life."

It is clear perhaps even from this brief excerpt that here is a student who is at a relatively torporous state at the end of his four college years, and probably has been further injured in his passage through college by feeling rebuffed and inadequate in a college environment where other students were much freer and scintillating. But even he registers some maturational gains in independence. (It is of interest to note that at the end of college this student was accepted at a major graduate school.)

The responses of the students to the open-ended questions are parallel to those they gave to the structured ones.

> Over half of them report much greater self-understanding[4]. (Only the Berkeley men are somewhat lower in this.) About half say that during their college years it has become less difficult for them to feel close to people. Half or more say that the academic pressures have become much more easy to handle.[5] Their social life in their junior and senior years compares very favorably with the freshman year.[6]
>
> Their sense of personal mastery is relatively high. Less change is reported in values. About one fifth each report much change in their moral views, their religious views, their political views. One third report much greater freedom to express their feelings and desires.[7]
>
> The way to the changes that have taken place caused only a portion of the students a struggle of conflicting thoughts and feelings. For about one fourth deciding on a major and for about a third that planning their life's work has involved them very much in a struggle of conflicting thoughts and feelings. Even in regard to sex a third of the womem and less than a fifth of the men describe themselves as having been involved in a struggle of conflicting thoughts and feelings.

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[4] SQ 61; [5] SQ 7; [6] SQ 34; [7] SQ 59.

Struggle and conflict are marked for only minorities of the students. For most students adaptation to the role demands of their college environment and to their anticipated future roles in society seems to take place without conscious conflict. The question arised whether the absence of such conflict and struggle betokens that alternatives were not faced up to with sufficient vigor so that students adopt roles without sufficient examination of how they fit them and without sufficient exploration and nurturance of their half-dormant proclivities and potentialities.

Analyses of responses by students who report a higher degree of conflict than their peers[8] seem to indicate that conflict and development go together. Students who report having experienced a greater degree of conflict than their peers in college turn out also to be people who report themselves as having engaged more frequently in creative activities, as having changed more in their personal characteristics, in freedom to express their feelings and desires, in their moral and political views. They attribute more frequently than their peers great influence in their development to their having been away from home, their having gained a better understanding of themselves, their relations with friends of both sexes, their confrontation with problems in their families, in other people, and themselves. They also attribute greater influence to ideas in books they read on their own (Table 2).
The students with a history of conflict also report more frequent participation in activities, having changed more and having been more greatly affected by various influences upon them. It is also of interest that the more conflicted students tend to report themselves as having engaged in social activities less than their peers.

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[8] A conflict measure was obtained by combining items from the Senior Questionnaire in which the students reported conflicting thoughts and feelings during college in regard to their (1) major, (2) future life's work, (3) sex and, (4) disagreement with parents, other adults, and friends. After the scores on this measure were computed, each of the four groups (Berkeley men and women, Stanford men and women) approximately equal-sized were divided into conflict groups constituting high, middle, and low groups. A total of 46 questionnaire items were examined and 19 of these were statistically significant for at least three of the four groups. For statistical purposes, where it was not possible to keep all three categories of response (i.e., frequently - occasionally - never) separate, the smallest extreme was combined with the middle and compared against the third.

Table 2A

Responses of Students High, Middle, and Low in Conflict (Figures are percentages)

	Berkeley											
	Men (N=287)						Women (N=269)					
	H	M	L	X^2	df	p	H	M	L	X^2	df	p
A. Activities Engaged in Frequently and Occasionally during College												
Civil rights	28	20	11	9.2	2	0.01	39	23	14	15.5	2	<0.01
Campus politics	33	38	19	8.8	2	0.01	48	24	14	27.1	2	<0.01
Creative expression: writing, painting, etc. (frequently only)	14	12	4	14.3	4	0.01	25	24	12	19.5	4	<0.01
Social, parties, etc. (frequently only)	25	40	36	5.2	2	0.07	29	49	44	7.3	2	0.03
Breaking rule for fun of it	30	21	12	9.8	2	0.01	15	14	5	5.9	2	0.05
Seeking off-beat places and people	56	48	38	6.9	2	0.03	73	61	40	21.3	2	<0.01
B. Much Change since Entering College in												
Freedom to express feelings and desires	51	33	26	14.5	2	<0.01	52	46	38	4.0	2	n.s.
Personal characteristics	44	31	24	9.5	2	<0.01	55	41	33	9.2	2	0.01
Political views	44	21	23	17.8	4	<0.01	35	21	15	10.4		0.03
Moral views	34	17	15	27.5	4	<0.01	41	23	14	22.6	4	<0.01
C. Changes in College Greatly Influenced by												
Gaining understanding of self	60	36	31	19.2	2	<0.01	73	68	49	13.6	2	<0.01
Confrontation with problems in self	59	36	21	32.0	2	<0.01	78	60	35	35.3	2	<0.01
Ideas read in books on one's own	34	23	13	13.5	4	<0.01	28	17	12	19.9	4	<0.01
Being away from home	51	38	28	12.9	4	0.01	53	52	43	2.5	4	n.s.
Problems in family (Greatly & moderately)	42	44	24	10.8	2	<0.01	62	49	32	16.8	2	<0.01
Close relations with opposite sex	46	29	23	18.7	4	<0.01	71	61	43	19.8	4	<0.01
Close relations with same sex	37	22	19	9.4	2	<0.01	48	41	30	6.3	2	0.04
Crises in relations with others	28	13	13	35.5	4	<0.01	62	36	14	47.8	4	<0.01
Confrontation with problems in others	28	16	8	20.1	4	<0.01	46	33	16	26.3	4	<0.01

Table 2B

Responses of Students High, Middle, and Low in Conflict (Figures are percentages)

	Stanford											
	Men (N=274)						Women (N=214)					
	H	M	L	X^2	df	p	H	M	L	X^2	df	p
A. Activities Engaged in Frequently and Occasionally during College												
Civil rights	28	18	10	9.6	2	<0.01	35	21	23	4.0	2	n.s.
Campus politics	28	40	24	6.2	2	0.05	39	30	21	1.5	2	n.s.
Creative expression: writing, painting, etc. (frequently only)	23	11	8	14.8	4	<0.01	39	21	21	7.7	4	0.10
Social, parties, etc. (frequently only)	37	54	52	7.0	2	0.03	54	54	44	1.6	2	n.s.
Breaking rule for fun of it	24	25	19	0.9	2	n.s.	36	13	18	13.1	2	<0.01
Seeking off-beat places and people	57	49	40	5.3	2	0.07	72	49	54	8.8	2	0.01
B. Much Change since Entering College in												
Freedom to express feelings and desires	47	37	21	13.3	2	<0.01	48	35	26	6.9	2	0.03
Personal characteristics	42	43	22	11.0	2	<0.01	53	43	46	1.9	2	n.s.
Political views	24	28	16	7.1	4	n.s.	26	13	8	12.7	4	0.02
Moral views	28	21	14	12.0	4	0.02	37	29	18	10.1	4	0.04
C. Change in College Greatly Influenced by												
Gaining understanding of self	72	52	42	17.4	2	<0.01	69	64	64	0.5	2	n.s.
Confrontation with problems in self	60	56	32	17.4	2	<0.01	82	63	54	12.9	2	<0.01
Ideas read in books on one's own	31	21	16	20.7	4	<0.01	27	13	13	12.2	4	0.02
Being away from home	46	34	26	8.6	4	0.07	47	41	28	11.7	4	0.02
Problems in family (Greatly & moderately)	45	39	24	9.2	2	0.01	53	47	41	2.1	2	n.s.
Close relations with opposite sex	49	46	26	11.7	4	0.02	74	60	64	5.9	4	n.s.
Close relations with same sex	44	37	28	4.7	2	0.10	51	53	43	1.6	2	n.s.
Crises in relations with others	27	23	11	19.9	4	<0.01	53	34	39	9.8	4	0.04
Confrontation with problems in others	32	22	10	19.4	4	<0.01	41	38	36	2.4	4	n.s.

Students' Perceptions of Determinants of Change

After having asked the seniors how they had changed since they entered college, we asked them: "What do you think contributed most to these changes?"[9]

> Between one third to one half of the students said that personal relationships contributed most. These percentages increase further if one includes other responses mentioning relations with other people, such as, living groups, the contact with a variety of people on campus, dating, love, and marriage.
>
> Next in order of frequency are responses in which the student reports his own inward disposition as a major source of change: his self-awareness, personal philosophy, self-reliance, responsibility.
>
> Between a fifth to a fourth of the students single out course work and professors as an important source of change. Additional numbers (a fifth or less) mention the challenge and difficulty of academic life. Relatively small percengages of respondents single out student government and political activities and job experiences as influences on them.

It will be remembered that when asked how they had changed, the students mentioned change in their personality more frequently than change in relationships with others. In the present question the order of the two is reversed. This could be interpreted to mean that students tend to locate the causes of change as outside themselves more frequently than within themselves (but caution is necessary as a question about causes may induce people to look for external factors). At any rate, the different distributions of the replies to the two questions are expressive of the college situation: Success is measured in terms of individual accomplishment, e.g., grade point average--hence, perhaps the frequent mention of individual change. At the same time paying attention to what is expected by the environment of professors or peers also is important--hence, the frequent mention of external influence. There is thus an intriguing interplay between expectations of individual achievement and social conformity.

Intellectual and academic activities trail once more considerably behind personal relationships as a source of change. It is one of many pieces of evidence we have found that the intellectual and academic aspects of the college are secondary or tertiary for most students when compared with their other concerns of emotional and social growth. This is corroborated by the students' responses to another open-ended question "Please indicate the most meaningful experience during your last three and one-half years? How did it affect your life?"[10]

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[9] SQ 60

> In response to the first of the two parts of this question, the highest percentages list love, marriage, friendship and living group experiences. (At Stanford even higher percentages list their overseas experience which, as we will discuss later, is experienced by the students as an unusual opportunity to establish meaningful friendships and good social relations.) Only between 2% - 5% spontaneously mention course work or student-professor relationships as the most meaningful experience.
>
> In the responses to the second part of the question "How did it affect your life?", the largest proportion is composed of replies listing self-understanding, self-awareness, self-evaluation. This percentage is swelled by those who list improved self-confidence and increased meaning to life. Second in order of frequency are responses that fall under the heading of relationship to others: insight into others, greater awarness of the world and greater tolerance. Last are responses falling in the area of choosing or changing one's major or career. These are very small, between 3% to 6%.

Again the open-ended responses of the students are corroborated by their replies to structured questions. We asked them "To what do you attribute the changes that have taken place in you during the past 3-1/2 years?"[11] and then gave them a list of 18 different influences.

> Between 42% and 66% checked their gaining understanding of themselves as persons as having had much influence on them. Next frequently checked was confrontation with problems and conflict within themselves. Next came close relations with friends of the opposite sex, close relations with friends of the same sex, being away from home, and their living group. That the influence of other people is primarily that of peers rather than adults is indicated by the fact that having had close relations with teachers or other adults is assigned great influence only by between 6% to 16%.
>
> Academic influences trail far behind personal and interpersonal influences. Between 22% to 34% say that ideas

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[10] SQ 66; [11] SQ 61.

> presented in course or by teachers had much influence. Still lower are participation in student organizations, committees, etc., to which about 10% assign much influence. Idealistic activities fare even less well. Participation in activities directed to social or political improvement gets endorsed by 7% to 10% of the students.

Once more it is the sphere of their private lives, rather than academic pursuits or public concensus that get the lion's share of the students' attention.

One way of corroborating what the students say about influences on them is to go to their behavior and see what influences they submitted themselves to. We gave them a list of 21 different activities or experiences and asked them to tell us how frequently they engaged in them during the college years.[12]

> The categories which the students most often checked as having engaged in frequently are reading of non-fiction and reading of fiction. (The men checked the second category less often.)

But in order to interpret these responses adequately one would have to know what amount of reading the students did as part of their assigned course work and what amount on their own.

> Next in order the students said they frequently engaged in social activities, parties, etc. Frequent participation in sports activities as a spectator is checked as often or more often than social activities by the men and somewhat less often by the women. Participation in sports activities as a participant follows next in line.
>
> A quarter of the Stanford women and a fifth of the Berkeley women report going to museums, symphony and drama as a frequent activity and the same proportions check creative expression, such as writing and painting. The men check this only half as often. Between 23% to 31% of the students check frequent attendance at the movies. Travel is a frequent activity for over one third of the Stanford students and one fifth of the Berkeley students. Relatively small percentages of students (never more than 10%) list the following: campus political activities, civil rights activities, service activities, off-campus, national, or community political activities.

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[12] SQ 17

These responses again indicate a hierarchical structure. For both sexes idealistic and humanitarian activities are at the bottom; for the men artistic activities are at the bottom, too. On top are social activities, sports, movies and travel. The pre-eminence of social activities should be viewed not just as a gregarious and rather superficial socializing but also as part of a deep concern that students have for getting closer to other people and to establish more satisfactory communication. But their social growth does not usually seem to extend to activities that involve broader social concerns. Personal growth and private pleasures seem to be predominant. Particularly for the men private pleasures do not include aesthetic activities, but do include sports; men describe themselves as participating in sports three times as often as seeking creative expression in writing or painting.

Changes the Students Wished For

The last two questions in the Senior Questionnaire were "Are there changes you wished for that have not occurred?" and "If it were 1961 again, what would you do differently?"[13]

> In response to the first of these two questions about half of the students either did not respond or said "No." (About one third said "No" explicitly.) Between 15% and 20% wished they had acquired more self-confidence and poise, or more of a sense of purpose, or otherwise had developed their selves further. Between 10% and 15% expressed the desire for better relationships with other people.
>
> If it were 1961 again close to a third of the students (except for the Stanford men where the figure is 19%) would have sought out different social arrangements, e.g., meeting more people, getting involved in more extracurricular activities, joining a different living group. An almost equally substantial percentage would have arranged their academic program differently, that is, not have settled on a major or career so quickly, taken a greater variety of courses and been more careful in their choice of courses, allowed more time to think. Finally, between 10% to 27% would have tried to be less self-conscious, more outgoing, to take themselves less seriously, or have attempted other changes in personal attitude. (Once more nearly one third either did not respond or said "No," to this question.)

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[13] SQ 37d, 37c

The relatively large proportion of students who spontaneously single out their academic program deserves special attention. The students' statements in the interviews suggest the kind of problems confronted by them. For instance, a premature career choice may saddle a student with a series of courses which have no great appeal to him and which in the end, when he turns to another career, have not been serving even a preparatory purpose. Another student, by the structure of the requirements or the nature of the grading system, may be kept from exploration in areas that he has a potentially keen interest in. Other students are kept by the inadequacy of advising on the relative inaccessibility of professors from finding out what is available to them and what individual modifications are allowed under the complex "legal" rules governing the curriculum. (See a later chapter by this author for suggested remedies in the curricular area.)

If it were 1961 again, between 19% and 24% would study harder. One might say that in distinction to the group just discussed these are the people who do not question the academic system as such, but wish they had succeeded better under it. For many students studying is desirable not so much for the sake of intellectual growth as for the sake of more self- esteem via more successful performance as measured by grades.[14]

Between 7% and 14% say they would have gone to a different school, a smaller or a larger one, a school with a different atmosphere and the like. This is one response where the students focus on an environmental factor. But such "sociological" perspective is much their rarer mood. Usually when they think of changing they think that something within them, e.g., an attitude or a capacity, needs mending rather than their environment.

> Among the students at Berkeley who expressed a wish for different social arrangements were 8% of the men and 10% of the women saying that they would have chosen different living situations. (At Stanford only 2% of the men and 1% of the women did so.) Of those that wished their living arrangements had been different, the largest group express themselves against living at home; a large proportion of the men a wish for fraternity life; and the remaining responses are scattered between those who would have preferred apartments and those who would have preferred dorms. A few express the wish for having exposed themselves to different types of living arrangements during their college years.

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[14] For the centrality of the "grade point average" perspective in the students' life space see the monograph by Howard S. Becker. The Grade Point Average Perspective. (mimeo).

It is somewhat surprising to find huge percentages of students who leave the two "wish" questions unanswered or say they wish for no changes or would do nothing differently. Such poverty of wishing or imagination seems particularly unsuited to their time of life when one might expect the expression of more regrets, phantasies, desires, perhaps even passion. This response pattern may corroborate the passivity and lack of idealism we have noted previously. It is perhaps also an index of the confinement of the imagination facilitated by the tight structuring of the college situation. As we will see later, between 57% and 71% of the students say they are depressed at least as often as a few times a month.

Career Plans

The discussion thus far has concentrated on the students' views of how they have changed, what influenced these changes, and what they wish had been different. We now will turn in greater detail to a description of the four years of the students' passage through college. We will begin with their career plans, then consider their attitudes to their courses and teachers, will next take up their extracurricular activities, their social and sexual life, and conclude with their conception of themselves, their values and interests.

When we started this study we somewhat naively assumed that the students would proceed in a more or less straightforward fashion from a fairly vague conception of what occupation they wanted to a relatively firm position by the time of graduation. In making this assumption we did not sufficiently consider two important factors: (1) students do not usually have much direct experience of what the work world is like and (2) career plans are very much part of the student's growing identity and our study has much impressed us with the incompleteness of their identity at the time of graduation.

Many students seem to undergo little struggle and little change in occupational plans from the freshman through the senior years. Only one third of the men and women report that planning for their life's work has involved them in a more pronounced struggle of conflicting thoughts and feelings. About half of the seniors say that when they entered the university they already had a fairly clear idea of what career or occupation they wanted for themselves. For many students there is little change in plans from the time that they fill out their application blank to the university to their senior year when they list in our questionnaire what occupations they plan to enter (See Table 3).

Table 3

Changes in Occupational Plans Between End of High School and End of College (Stanford Interview Sample)

	Stanford Men (N=48)	Stanford Women (N=44)
No change	52% (25)*	34% (15)*
Moderate change	17% (8)	9% (4)
Much change	31% (15)	27% (12)**
Marriage plans only at end of college		30% (13)
	100% (48)	100% (44)

For some this relative stability means that they have found their life's work early. For others it means a persisting rigidity and failure of seriously considering more appropriate alternatives. From the interview data it is our impression, however, that for the bulk of the male students there is a certain amount of "nominalness" in their listing of an occupation. They need to have an answer ready when asked what they will do later and to have a guiding principle when selecting their courses and majors while in college. (There is an element of artificiality here because undergraduate courses frequently are not "vocational" or, when they are, are often repeated in one fashion or another in graduate school.) We found that many students about to enter graduate or professional school do so with the expectation that there they will find some activity which will really interest and involve them. Thus, a student will enter law school, in pursuit of a "plan" he had voiced even as a freshman, but he thinks of law school as providing a further moratorium. A law degree is compatible with many different fields, e.g., business, politics, philanthropy. In the meantime, he considers the study of law as good training for the mind and he hopes that at some point in law school the really absorbing involvement may occur that never happened in college. Thus, when asked why he wanted to go into the law, one of the students replied in his last senior interview, somewhat rattled:

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* These percentages can be compared to the figures in our Senior Questionnaire where 4% of the Stanford men and 37% of the Stanford women said they had a fairly clear idea of what career or occupation they wanted for themselves. (But we did not cross-check whether the same people who had a clear idea as freshmen did not change.)

** In the Senior Questionnaire 35% of the Stanford men and 37% of the Stanford women said that planning their life's work has involved them very much in a struggle of conflicting thoughts and feelings. The 27% figure in this table would be enlarged if one included those whose struggle eventuated in declaring for marriage only.

> "What else could I go into? I don't want to go on and study economics in graduate school because I don't want to become a professor of economics or an economist. I'm very happy I majored in it; I enjoyed it, but I'm not trying to make it a career. I don't want to go in the army now because I want to go to graduate school and now is the time to do it. I want to study law, it's going to be a tool. Even if I don't become a lawyer, I've got to know something about it and I think it's fairly valuable knowledge. I think studying law demands logic. I think also the ability to express myself well and think clearly is going to help me, no matter what I do. So those are two reasons why I want to go into it. I think I can do a lot of things with a law degree and I think I'm going to enjoy studying law, at least after the first year I'll enjoy it. I think I'll enjoy it then. But this is the only reasonable course I have open to me, I think. It's the one that's the most appealing. I haven't set myself toward the law. In fact I can see I don't really want to become a practicing lawyer. I don't have that desire. I may over time. But I'm a neophyte. Even though my father's a lawyer I really don't know what it entails, how much I like it. And my father loves what he's doing, he just wouldn't want to do anything else. He loves what he's doing. He's just perfectly happy. Yet I'm not sure that I would be happy working 60 to 70 hours a week."

Search for a continued moratorium on occupational (and life) commitments may also be expressed in the large percentages of students (between 21% and 28%) who are considering the Peace Corps as a possibility.[15] Part of the appeal of the Peace Corps seems to be that it is one legitimate avenue for taking more time for further development and sorting out of motives.

How important for their lives do students view occupation? Out of a list of 14 activities, career or occupation is ranked first by the men more frequently than any other activity. For the women the highest percentage rank their future family first, and career is fourth.[16] This is not a surprising pattern. By virtue of our societal arrangements alone, career looms larger as an objective for the men, and family for the women. But what is the motivation behind the interest in career? We have found the uncertainties and lack of orientation displayed by the student just quoted to be quite common among our interviewees. Similarly, Robert Mogar who used an earlier version of our list of 14 interest and activities with 116 San Francisco State College freshmen also found that the men ranked career first. But in analyzing their responses to open-ended questions he found that "few students discussed career in terms of intrinsic interest, social usefulness, or self-fulfillment, although this was the intent of the question. Rather, career was treated as a means (to income, material security, or status), not as an end in itself."[17] (Data that we are currently collecting in another study suggest that the seniors studied by us are less frequently security-oriented and more frequently intrinsically motivated than Mogar's freshmen.)

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[15] SQ 15; [16] SQ 74.

The lack of orientation in regard to career has many roots. Part may be due to education at school and at home not having succeeded sufficiently in connecting work with pleasure (and hence the underdevelopment of the spirit of workmanship). Part of it may be due to the egocentricity of people of college age who still are so involved in achieving their own identity that energy and direction is wanting for concern with the objective world outside of their own selves. Part of it may be due to the college situation encouraging the student to be concerned with his own performance, rather than putting him to work on tasks useful to others and making him a genuine participant in realistic work. Finally, there is the lack of exposure to the work world. For some it will be many years after college when they will first be doing the work for which they have "prepared" over such a long time.

The prolonged moratorium and the lack of real acquaintance with or involvement in the work world make it very difficult for the student to make an occupational decision. It seems likely to us that many never make a decision. They "select" each institution (college, graduate school, corporation, university) with many reservations and while seemingly keeping an open mind. But in fact, with each step some of the decision is made for them. Their sojourn in each institution keeps on determining their outlooks, skills, even character. Moreover, years of investment in schooling of a particular kind are not easily repudiated. All along, they may be committing themselves to a basic life plan with insufficient attention to their own interests, aptitudes and with not enough of the needed freedom from the expectations of parents, peers and other reference groups.

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[17] Mogar, Robert E. Value Orientations of College Students. Psychological Reports, 1964, 15, 747-748.

Finally, our data indicate that the students studied by us conform to the pattern of upward mobility that has been one of the traditional functions of the American college. They also show a trend away from business occupations that other investigators have also noted. We asked the seniors what they expected to be doing 10 years after graduation.[18] In comparing their occupational aspirations with their fathers' occupations, we find Berkeley and Stanford fathers in the categories of skilled worker, tradesman, cleric, but none of the sons. Only half as many sons as fathers expect to go into business, with none of the sons wanting to become owners of a small business and with considerably smaller proportions planning sales or managerial careers. Medicine and law register large gains, and so does engineering at Berkeley. The greatest gainer is education or teaching. Only very small percentages of the sons plan to enter the field of the natural sciences and the arts, though they do so in larger proportions than their fathers.

The picture for the women shows even more traditionality. About half of the Berkeley and Stanford mothers are listed as housewives by their daughters and about half of the daughters expect to be housewives ten years after graduation.[19] If one adds to this the 24% of the daughters at Berkeley and 14% of the daughters at Stanford who list education as a future occupation, the figures for potential housewives may be put even higher, because many of these may view education as a very temporary occupation. Large percentages of the Berkeley and Stanford mothers are described as holding clerical and accounting jobs, while nearly none of the daughters expect to be in these occupations.

As other data to be reported later in this chapter also indicate, women are still primarily oriented towards the role of wife and mother. The interview data make clear the potentialities for conflict because women at the same time have developed capacities during the college years that they cannot easily let remain unused. They have developed interests that they cannot easily give up. They have developed habits of self-assertion that may conflict with their marital roles. Corresponding to the men's lack of clarity about what the occupational world will bring, there is lack of clarity for the women what marriage will bring. It is worthy of note that the student activists who have raised many revolutionary questions have thus far said little--beyond criticisms of residential restrictions--about the role of women and about social changes in their behalf.[20]

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[18] SQ 16

[19] At Stanford at least, if our small interview sample is representative in this respect, there is no difference among women majoring in the humanities, social sciences, and natural science in regard to their occupational and marital plans 10 years after graduation.

Attitudes to Courses and Teachers

For some students the academic program is intimately connected to their career plans; it is like a means to an end. For others it is a way of finding themselves. Perhaps for the bulk it is simply what society asks them to do.

> How do students see the place of intellectual activities in their own lives? When asked to single out their most important future activity out of a list of fourteen, between 3% and 8% of the students named intellectual and artistic activities.[21] (About a quarter of the students ranked intellectual and artistic activities among their first three preferred activities.) About a quarter of the students say that ideas presented in courses or by teachers have had great influence upon them. Between 1% and 6% ranked curiosity and knowledge as the most important of a list of eleven needs[22] (and 11% to 22% among the first three). Compare this with the rankings given to emotional well-being, love and affection, maintaining self-respect, and being accepted and liked by others. Between 73% to 91% of the students list one or the other of these four as their first choice and each one singly is named first by between 11% and 35% of our various student groups. Achievement is listed first by about 16% of the men and about 6% of the women.

These figures as well as what we have reported earlier about students' academic and intellectual involvement tend to support the assertion that for no more than a quarter of the students the current academic-intellectual program of the college has a strong intrinsic interest.[23] The 25% figure is probably on the high side as students are likely to pretend to more involvement--even to themselves--than they really have. (There are different "masks," they told us, they put on for different people: one mask for the teacher, another for the dean, another for the psychologist.) If even at highly selective institutions only a fourth are strongly committed to the intellectual program as it now is, serious questions about present procedures are raised. What about the education of the other 75%?

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[20] See the subsequent chapters by Harold Korn and Peter Madison for detailed discussions of career choice.

[21] SQ 74; [22] SQ 71

[23] Richard E. Peterson reported that of 12949 entering freshmen at 23 different institutions, 19% said that "academic orientation" was the most accurate self-description; the other three orientations were "collegiate" (51%), "vocational" (27%) and nonconformist (4%) (A Summary of Responses to College Student Questionnaires. Princeton, N.J.: Educational Testing Service, 1964.)

To win these students for reflective thinking and taking pleasure in intellect, we may need to pay much attention to the different ways of cognitive, psychological and social development, and to the students' intrinsic purposes and wishes. (See the later chapter by this author in this volume.) Perhaps at the present time we favor students whose relation to the world is strongly by way of concepts and neglect those who relate to the world by way of action, or of feeling, or of involvement with other people. The latter may need a different route to also learn to take greater pleasure in intellect.

> Between 55% to 71% of the students say that when they entered the university they had a fairly clear idea of what they wanted for an academic major.[24] About a fourth report that deciding on a major has involved them in a more pronounced struggle of conflicting thoughts and feelings.[25] An actual count of persistence and changes in major confirms the students' self-report of relative stability.

Such stability might indicate maturity of commitment, but as in the case of occupational choice it seems more a function both of student drift and the academic requirement according to which a major must be declared at a certain point. Sometimes the anticipated requirements of graduate or professional school more or less force the student's hand. Where there is more freedom in choice of major, the greater friendliness of secretaries or the greater ease of obtaining higher grades may tip the scales between one department and the other.

Grades are a central, and for many students the central reality of academic life. Grades control access to desirable graduate and professional schools. They control access to desirable extracurricular activities, including whether one may be desirable to a certain fraternity or be allowed to attend an overseas campus. Retention of a scholarship and other privileges hinge on them. They also have great emotional values in the eyes of many peers, of parents, and, above all, often deeply involve the student's own self-esteem. The grade point average is a steady presence and the student usually knows his to two decimal points, forever calculating and recalculating its contingencies. Like a Calvinistic deity it allows for the cancelling of no transgressions; every slip is forever included in its cumulative bulk. What attitude do the students in our samples take to grades?

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[24] SQ 1; [25] SQ 2.

> Between 37% and 51% of the seniors say that the emphasis on grades in college has stimulated them to greater achievement.[26] But between 40% and 48% say that the grading system has kept them from trying out courses and fields they otherwise might have, that it has given them a bad time and had little influence on their achievement, and that is has lowered their self-confidence. Similar divisions appear in a questionnaire we administered in 1963 to 600 freshmen at Stanford at the end of their freshman year, 39% expressed acceptance of the grading system as it is, while 36% endorsed the statement that it would be better to grade all courses "pass" or "fail."

Students' reactions to the grading system are mixed. The large proportions of even seniors who say that the grading system has stimulated them to greater achievement may be a sign that the grading system owes its persistence to being so much like other externalized reward systems in our culture. Grades may be particularly useful to those who need external judgments and rewards, who need others to tell them how well they are doing. But it is also noteworthy that more than a majority of those who see grades as a stimulus to achievement also say that the emphasis on grades has not made them happy. (But who says that achievement and happiness should be related?)

To become livable the grading system requires its own adaptations. This is expressed, for instance, in what students call "psyching out" the professor, that is, determining what he wants on examinations papers via a study of his previous tests, of his intellectual and emotional preferences and other clues he provides in the classroom. Lectures are preferred by many students, among other reasons, because they tend to present material in a more organized and comprehensive fashion and serve as a more convenient basis in preparing for exams, perhaps regardless of interest and involvement. Avoidance of courses where a low grade may be picked are other attempts to better one's chances, often at an educational loss.

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[26] SQ 6

The pattern just noted--that different groups of students will respond quite differently to the same situations--is a frequent occurence. Students often split three or four different ways when they are asked to evaluate a teacher, the contents of a course, the examination or grading, etc. When such differences are found, a common reaction, including by faculty or administrators, is to say that the variety of the responses justifies leaving things as they are. For us, the variety of the responses points to the existence of different needs, styles and phases of development among different students.

The educational task, therefore, would seem to be to identify these differing groups better and then gear teaching methods and contents differentially towards them. For instance, those students who think that the grading system interferes with their education, particularly as their numbers are large, seem to need different arrangements from those who are satisfied with it. One cannot assume either that the one or other group is "right." In regard to those who are satisfied with the grading system one would have to explore to what extent this is based on the underdevelopment of internal incentives for learning. Those who are dissatisfied may not have come fully to understand the benefits of realistic evaluation of one's work. (One can envisage a freshman course in which students are allowed to select voluntarily sections in which there are letter grades, "pass" or "fail" grades, or no grades. One then could learn more about the causes of these different preferences and the students could be confronted by the different consequences of different choices.

> In contrast to the importance students attach to grades, they rank low in importance getting to know their professors in or out of class or getting recognition from them. Thus, between 80% to 86% of the men and between 60% to 76% of the women rank getting good grades first, second, or third in importance to them.[27] By contrast only 11% of the men and women ranked getting recognition from their professors as of the same degrees of importance. Between 17% and 24% of the student rank getting to know him outside of class as first, second, or third in importance. (The figures for the Stanford women are higher: 40% and 20% respectively.)

Such low ranking may be due to the fact that the students often have no close contacts with their professors and they may rank knowing and getting recognition from professors low, not because they do not consider them desirable but because they find them not easily available. To make things more complicated, many observations show that students are highly ambivalent about closeness to professors, that they wish to be as much left alone by them as they want their attention and approbation. (There is a certain amount of professional vanity which assumes that if professors would only spend more time with students that the students would be much happier--something that is frequently belied by such contacts as exist. It is the nature of the contact, not its frequency, that is crucial.)

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[27] SQ 5

> Students feel that they have changed in their academic efficiency. Between 32% to 41% say they have gained much in efficiency as students since they entered college.[28] As they look back and compare their senior year with their sophomore year 49% to 66% say that the academic pressures have become easier to handle.[29] (In a junior year interview series dealing especially with academic matters, many students seemed to feel they had changed not so much in their conceptual sophistication as they had in learning what was important to the professor, what the style of a specific matter was, and what was needed for examinations.)
>
> The first quarter or the first semester freshman year towers over all others in being reported as particularly difficult academically.[30] At Stanford there is an easing off in the second and third quarters, with a slight increase again in the first quarter of the sophomore year. The greatest ease is reported for the spring quarter of the junior year and senior fall quarter, the quarter just preceding the taking of the questionnaire. At Berkeley the spring freshman year is reported difficult by double the percentages of people as at Stanford. In addition at Berkeley there is a sharp rise in the percentages of students who report satisfaction with their academic work in the spring part of their sophomore year and the fall of their junior year.

The rise in satisfaction at Berkeley may mean that the transition from lower to upper division status, which is more marked at Berkeley than at Stanford, gives the students a new assurance of their staying power. Stanford by contrast seems to be able to reassure people earlier about their academic status, and this may be a function both of its greater academic selectivity and its providing more personnel, such as deans, graduate student resident advisors, upperclassmen sponsors, who give information, moral support and indicate the university's personal interest in the students.

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[28] SQ 59; [29] SQ 7; [30] SQ 8.

Many freshmen (and upperclassmen in retrospect) assert that they came to the university with high intellectual expectations only to find them stifled not just by the academic requirements and the nature of many courses, but also by the unintellectualness of their fellow students. We heard complaints about the lack of intellectuality of the other students so often that we inferred that at least some of those who complained about this must be among those that others complained about. How might one explain this phenomenon? It suggests the absence of curricular or other sufficiently effective arrangements which could respond to this intellectual willingness. A senior (Stephen B. Hurlbut) who served as a sponsor in a freshman dorm writes in a paper: "When talking privately with me, a few would express genuine liking of some Civ and English readings much more strongly than they usually expressed to their peers...[A group of] 'underground intellectuals' participated in the freshmen literary magazine, art show, creative writing groups and freshmen seminars, often without their hallmates knowing."

Peer pressures can militate against active involvement in intellectual pursuits and one may assume that both fear of competition and fear of intellect are among the causes. Intellect is feared because in the student's mind intellectual pursuits are perceived not just as the cold amassing of facts but as a style of life which treatens his established ways of feeling and acting; to let oneself think differently fuses with letting oneself feel differently.

Apart from peer pressures, the incongruity between what is presented in the classroom and the student's own intellectual inclination and phase of cognitive-affective development make intellectual involvement difficult.

There is an even more subtle factor. Many, probably most students, have a passive orientation to learning. Even "good" students expect to be stimulated. But when the academic environment does not provide such stimulation sufficiently and at the same time makes one feel that one ought to be more interested, guilt is inevitable. Not surprisingly this guilt may be projected onto others: the others are not intellectually interested, but one would do better oneself if only the others were more interested.

We have stressed earlier the relatively small proportion of students whom one might describe as genuinely active intellectually during college. In the light of that, one might suggest that if the freshmen's intellectual eagerness had a more secure base, it would not so easily be discouraged either by peer resistance of by faculty incongruity. Still, the spark is there early in the freshman year and we fail to use it. The psychological potency of the moment of entrance to college is worth much further exploration.

Attitudes to the University Administration

We asked the seniors how satisfied they had been with the relations to the university administration. Our questionnaire was given at the height of the crisis at Berkeley early in 1965; similar though not as strong tensions were felt at Stanford.

> About 55% of the students at Stanford declared themselves either satisfied or neutral about administration-student relations and about 40% of the Berkeley students did so.[31] About 10% of the Stanford students were very dissatisfied with the administration and about a quarter of the Berkeley students were.
>
> We also asked the students in an open-ended question to name two or three things in the administration they would like to see improved.[32] By far the largest number of responses appeared under the heading of greater cooperation between administration, faculty and students in administrative affairs. The students asked for the lessening of the bureaucratic structure at the university, increase in personal contact, more attention and real listening to students, more student and faculty authority. 63% of the Berkeley men and 81% of the Berkeley women mentioned this spontaneously while 31% of the Stanford men and 43% of the Stanford women did so.
>
> About a quarter of the students at Stanford and a fifth of the students at Berkeley call for changes in administrative personnel or their attitudes. About a fifth of the Stanford students and 13% of the Berkeley students want to do away with "paternalism" or with "arbitrary" decision-making. Only very small percentages, 1% of the Stanford men, none of the Stanford women, and about 5% of the Berkeley students suggested stricter control of students including the "unruly element."

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[31] SQ 92; [32] SQ 96

Many students are here expressing their search for more attention to individualist values in an impersonal society. They are also expressing the special need that people of their age have for recognition from adults, to strengthen an as yet shaky conviction that they too can make it into an adequate adulthood. They want more attention from "papa" and at the same time reject his paternalism. Thus they exhibit their developmental problem which requires both a leaning on and modeling after "father" as well as freeing oneself from dependence and submission. Given such ambivalence, the administrator can maneuver himself into a position where whatever he does, he cannot win, because he will do "wrong" in terms of the one or the other side of the student's conflict. But he can also learn to discern where guidance and where "keeping off" is the preferable course and thus help to make the student more independent without depriving him of some of the controls which the student also needs and which, hopefully, he is in the process of internalizing.

Favorite Student Activities

We now turn from the academic life of the students to their other activities, residence, and friendship patterns.

> As already indicated, apart from reading, students describe themselves as engaging most frequently in social and in sports activities, and the women do not lag too far behind men in the frequency of their participation in sports activities as a spectator.[33] Attendance at movies is next in order of frequency and this is followed by lectures. Between 17% and 25% report frequent attendance at church or church-connected activites. Only very small percentages of students describe themselves as participating frequently in civil rights activities (between 4% and 7%), national or community political activities (between 2% to 4%), or even campus political activities (4% to 8%). From 3% to 10% say that they engage frequently in service activities off-campus. Six percent of the men and about 12% of the women seek out off-beat places and people frequently.

What differences are there in favority activities between men and women and between Berkeley and Stanford students?

> As far as male-female differences are concerned, women read more often than the men. They attend lectures, the museum, symphony, or drama more often, write, paint, and

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[33] SQ 17.

> seek other creative expressions more often. They engage more often in service activities off-campus and serve more on student committees. They attend church or church-connected activities more frequently than the men. But the men engage more frequently in sports activities both as participants and as spectators (Table 4).

In sum, the women show a greater orientation towards intellectual, artistic and service activities. This is true not only at Stanford where the women are more highly selected than the men, but also at Berkeley where they are more evenly matched.[34] It is particularly worth noting that this male-female intellectual and aesthetic discrepancy persists at the end of four years of liberal education.

There are fewer differences between Stanford and Berkeley than there are between the men and women students.

> Stanford students more frequently read fiction, attend lectures, engage in social and sports activities, serve on student committees and travel. The Stanford men report themselves as going to the museum, symphony and engaging in sports activities as a participant more often than the Berkeley men (65% vs. 55%). Sixty-one per cent of the Stanford women say they read fiction frequently as against 48% of the Berkeley women. Twenty-two per cent of the Stanford women say they occasionally break rules for the fun of it as against 11% of the Berkeley women (Table 5).

These responses point towards somewhat more intellectual involvement, social activities, and student self-rule at Stanford. These differences may be due to the even more selective entrance requirements at Stanford and to the higher social class background of Stanford students.[35]

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[34] The mean SAT verbal score for the entering Berkeley men in 1960 was 548 (S.D. 93) and for the women 544 (S.D. 86). The score for the entering Stanford men in 1961 was 617 (S.D. 70) and 664 for the women (S.D. 63).

[35] It is to be kept in mind that Berkeley is highly selective too, taking only the top 12% of the graduating seniors of the California high schools. As Martin Trow has pointed out: "In 1960 Berkeley admitted...420 students with SAT verbal scores of over 650, and almost 1000 with SAT scores of over 600, more at that level than enter MIT and Amherst combined." It also admitted 1,500 students with scores below 500 - more than triple the number with scores that low who were admitted to Kutztown State College in Pennsylvania. (Martin Trow. Notes on Undergraduate Teaching at Large State Universities. Stanford: Center for Advanced Study in the Behavioral Sciences, 1966, mimeo. This study is cited by S.M. Lipset and P.G. Altbach. Student Politics and Higher Education in the United States. Comparative Education Review, 1966, 10, 347.

Table 4

Differences Between Men and Women in Activities Frequently[1] Engaged in During College (Figures are percentages)

	Men Berkeley & Stanford (N=560)	Women Berkeley & Stanford (N=480)	X^2	df	p
Reading fiction	34	55	45.0	1	<0.01
Service activities, off-campus (frequently & occasionally)	21	40	47.4	1	<0.01
Sports as a participant	34	20	34.5	2	<0.01
Climbing, diving, flying, etc.	35	21	28.3	1	<0.01
Museum, symphony, drama[2]	10	22	84.8	2	<0.01
Reading non-fiction	53	64	13.8	1	<0.01
Student committees (frequently & occationally)	41	52	13.0	1	<0.01
Creative expression: writing painting, etc.[3]	12	23	43.4	2	<0.01
Seeking out off-beat places and people (frequently and occasionally)	48	58	9.9	1	<0.01
Sports as a spectator	46	36	20.5	2	<0.01
Lectures	19	28	21.1	2	<0.01
Civil rights	19	26	5.7	1	0.02
Breaking rules for the fun of it (freq. and occationally)	22	16	5.5	1	0.02
Church attendance or church-connected activities[4]	17	22	14.9	2	<0.01

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[1] Complete distributions in SQ 17.

[2] 41% of the men and 16% of the women report themselves as never having attended a museum, symphony, drama.

[3] 56% of the men and 37% of the women report themselves as never having engaged in creative expression.

[4] 63% of the men and 51% of the women report themselves as never having attended church or engaged in church-connected activities.

Table 5

Differences Between Berkeley and Stanford Students in Activities Frequently[1] Engaged in During College

(Figures are percentages)

	STANFORD Students (N=486)	BERKELEY Students (N=554)	X^2	df	p
Student committees	58	36	49.9	1	<0.01
Travel	39	22	40.0	2	<0.01
Social, parties	49	37	15.4	1	<0.01
Sports as participant	34	23	17.2	2	<0.01
Reading fiction	47	40	5.6	1	0.02
Movies	25	31	4.4	1	0.04
Breaking rules for the fun of it (frequently and occationally)	22	16	6.5	1	<0.01
Museum, drama, symphony	17	14	7.5	2	0.02
Lectures[2]	23	24	26.8	2	<0.01

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[1] Complete distributions in SQ 17.

[2] 64% of the Stanford seniors and 51% of the Berkeley seniors report themselves as having attended lectures occasionally.

NOTE: In addition, the following statistically significant differences obtain: Stanford women students report reading fiction more frequently than Berkeley women, but the men in the two schools do not differ from each other. 22% of the Stanford women and 11% of the Berkeley women report having broken rules for the fun of it frequently or occasionally. 25% of the Stanford men and 17% of the Berkeley men report themselves as having engaged in off-campus service activities frequently or occasionally.

The students' reported behavior is usually consistent with their expressed attitudes. In response to the question of what will be important to them in their lives they rank low participation in community affairs, activities directed towards national or international improvement, religious activities, helping other people.[36] There are two instances where the students' attitudes and behavior seem to diverge. (1) Between 35% and 51% of them reported themselves as engaging frequently in social activities, parties, etc. At the same time they rank social life and entertainment quite low in importance for their life after graduation. (Nine per cent or less rank it among the first three of a list of fourteen.) But when one considers that love and affection are ranked among the first three by nearly half of the men and between two thirds to three quarters of the women, the discrepancy seems to dissolve and helps us to understand what the students are really after in their frequent social activities. They seek for deeper engagement and meaningfulness. As we will see later, their relationships with other people have been both a source of problems and of pleasure and progress for them during their college years.

(2) The second discrepancy is not so easily resolved. Four per cent or less of the students anticipate sports or athletics to be important in their lives after graduation. Yet about half of the men and more than a third of the women had reported frequent attendance at sports events and large percentages had said they often actively engaged in sports as participants. In their interviews with us the students also often mentioned sports activities spontaneously as sources of pleasure. The denial of importance to an activity that, as the students' behavior indicates, seems quite important to them raises an interesting question. Perhaps the academic emphasis of college, uneasiness about pleasure, and a sense of the infantile components of pleasure in sport all combine to account for this low ranking. Sports of course are not the only area in which students fail to integrate their impulses, pleasures, and interests into their growing adulthood. Sex, for instance, is also ranked as low importance even though it is a frequent object of their talking and thinking.

Residence Patterns

Residence requirements differ between Berkeley and Stanford. At Stanford, women undergraduates are required to live in college dormitories throughout their four years; the men are required to do so only in their freshman year. At Berkeley, the students are free to live wherever they want to. The university provides housing and has built many additional dormitories in the recent past, but can house only a portion of all undergraduates. Particularly, the freshmen in 1961 experienced difficulty in obtaining housing. Joining a fraternity or sorority upon entering Berkeley solved the housing problem for some of them.

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[36] SQ 74.

The fact that Berkeley allows choice of residence provides us with an instructive opportunity to ascertain student residential preferences when left to themselves.

> Of the Berkeley senior men reporting, 26% had started out in dormitories as freshmen.[37] Only 11% of the seniors lived there. For apartments the trend is the reverse. Ten per cent started out in apartments and 44% are there in their senior year. Fraternity residence begins with 13% in the freshman year, reaches the highest point of 20% during the sophomore year and drops to 11% during the senior year.
>
> The figures for the Berkeley women are similar. Thirty-nine per cent are in the dorms as freshmen and 10% as seniors. Sorority residence begins with 13%, reaches its peak during the sophomore year with 17% and slightly drops to 15% during the senior year. Eight per cent of the freshman women are in apartments and 49% of the seniors.
>
> About 19% of the students of both sexes lived at home as freshmen and about 10% of the seniors did. Moreover, as Dr. Alfert reports, those who live at home drop out of the university in much larger proportion than those who live in dormitories, apartments, fraternities or sororities.[38]

Some students even start out their college residence in a hotel. A woman student among our interviewees who felt very shy with people began in a hotel room. She gradually invited other students to her room to listen to music together and to talk. The following semester she moved into a dorm. Step by step she developed closer and more mutually gratifying relations with other people. One wonders how large is the number of freshmen who have a need for privacy and even distance from other people and who are excessively intruded upon by the present dormitory system which is compulsory in many places.

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[37] SQ 25.

[38] Alfert, Elizabeth. Housing Selection, Need Satisfaction and Dropout from College. Psychological Reports, 1966, 19, 183-186. Dr. Alfert's study is based on data collected by the Student Development Study prior to the senior year.

Individuals differ sharply - the same individual may differ in any college year. We were impressed by how important the sorority was for some Berkeley freshmen women as a means of bridging the gap between the more or less protected home environment, particularly if she came from a small town, and the big and somewhat frightening university. The sorority behaved like Mama, a fairly strict Mama at that, setting down specific hours at which freshmen must study, giving more or less precise rules as to how to behave on a date, including whether a boy is to be kissed or not to be kissed on a first date. These rules become more relaxed as the freshman year continues. For some the sorority becomes less important, some leave it. In general, sorority or fraternity membership seems to become less important in the junior and senior years. But our observations have impressed us with the important support provided by small group membership. (Wherever fraternities are restricted or abolished, attention needs to be given to finding proper substitutes.)

At what point does group membership become less supportive and more constricting? That question transcends fraternal organizations. We have observed a common tendency for students to associate with people similar to each other even if it went at the expense of broadening their cognitive and imaginative capacities. It suggests to us that attention to "mixing" students is a problem that cannot be confined to the freshman year primarily. For some students the freshman year is the worst one for mixing because the shock of the difference of other people often is too severe.

At Stanford all women undergraduates remain in college dormitories for four years. The men are allowed to move off-campus from the beginning of the sophomore year and 11% of our respondents report themselves as having lived off-campus during their sophomore year. This rises to 29% in their junior year and to 37% in their senior year. About a third of the men are found in the dormitories from the sophomore through the senior years. A fourth report themselves as residing in their fraternities during their sophomore and junior years and a fifth during their senior year. Eighteen per cent of the Stanford men among our respondents and 27% of the women were on overseas campuses during their sophomore year. This dropped to 5% for the men and 14% for the women in their junior year.

About the same proportions, roughly a third, of the Berkeley and Stanford men students live in university dormitories in their sophomore year. But while in both universities there is a strong trend towards off-campus living, the Berkeley men leave the dorms in much larger percentages. Even higher percentages of the Berkeley women do so (41% resided in dorms sophomore year and 10% senior year). This dramatic tendency of women to leave their campus residences is an important one to ponder for institutions that require their women to live in.

Moreover, when left to choose freely, students and particularly upperclassmen, tend to move into apartments or houses of their own. The reasons for that are many. Some prefer the intimacy of one or two partners or of a small group. Others want to save money. Some have the more negative incentive of fleeing from the noise and intensiveness of the dorms. Still others leave because, in spite of appearances, residential living does not provide enough opportunity for friendships and closer relationships with a group, nor does it seem necessarily to facilitate that participation in campus culture that the commuter colleges often so longingly ascribe to the residential institutions. For some, moving off-campus is a seeking of refuge from, or protest against the perceived coerciveness of the institution. Students in recent years, at many different residential colleges, have increasingly propagated for the right to move off-campus. We are probably dealing with a phenomenon that is subject to some extent to the swings of the Zeitgeist - a difficult problem for institutions who have to make heavy financial investments and would like to plan for an indefinite future. But it is probably safe to say that for the foreseeable future dormitories will remain viable for many students only if changes are made that take more fully into account the students' desire for more genuine companionship. It is conceivable that the residential principle is in the process of some partial erosion, just as the cohesiveness of college class (e.g., the class of '65) has dwindled in many places.

How important to our students were their residence and the activities and relations they made possible? We asked the seniors to list the three organizations that had been the most important to them during their college years;[39] the question was open-ended. From the high percentages of responses it would appear that practically everyone who belonged to a fraternity, sorority, or eating club listed these as important. (48% of the Stanford men and 25% of the Berkeley men listed fraternities; 24% of the Berkeley women listed sororoties.) Stanford has no sororities and it is of interest that the living groups are listed as important by only 33% of the women. But next to fraternities or sororities, the living groups draw large, though proportionately much lesser percentages. Eighteen per cent of the Berkeley men, 22% of the Berkeley women, and 14% of the Stanford men list their living groups as important.

These responses may be compared with preferences for other groups. At Berkeley 20% list civil rights and other "action" groups. Similar proportions list professional clubs, religious groups, hobby clubs. At Stanford, the overseas campuses, student government, international relations activities, and hobby clubs are singled out, each by between 14% and 20% of the students.

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[39] SQ 18.

Sports groups are listed by between 13% and 19% of the men and about 7% of the women.[40]

Summer Activities

Having looked at what students do while in school, the question arises what they do during the summer. This question was raised early in our study because we were aware how much the university structured the students' time and activities and we wished to know what students do when they are not under the direct control of the university. Our expectation was that we might find many students who make creative use of their freedom. But from the first series of interviews after the summer of freshman year it became clear that there was no strong tendency on the students' part to make the summer a specially meaningful experience. We found that many tended to submit themselves to controls of their time and activities similar to, and sometimes even more coercive than those of the university. Other students would more or less drift along. The instances of a coherent, meaningful summer experience, either in work or personal growth, were relatively rare. One may ascribe this to the need for a period of relaxation and recharging. But it is not our impression that the summer experience is guided by a more or less implicit desire for purposive rest, but that it is an expression of a relatively passive attitude on the students' part, not taking their own lives into their own hands more forcefully. (A meaningful Summer, however active, would probably have been more useful to many students than the rest they were getting.) As will be seen later, however, confrontation with their parents and a move towards independence was a marked feature particularly of the summer after the freshman year.

> About three fourths of the men students and about two thirds of the women students work during the three college summers.[41] (There is a drop for the summer after the sophomore year at Stanford, probably due to many students being on their way from and to the overseas campuses.) The largest percentages of men students in the summer after their freshman year were engaged in summer employment that was coded under the heading of general labor, that is, work which requires minimal or no skills but a certain amount of physical strength and stamina. Thirty-one per cent of the Stanford men and 23% of the Berkeley men are found in this category in the summer after their freshman year. For the

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[40] For a full discussion of the differing patterns of residence living of Stanford men see the chapter by Mrs. Lozoff. (Ch. VII.)

[41] SQ 19.

> women, office work is the highest category. Further, in the summer after the freshman year twice as many women as men are engaged in such service jobs as camps counselor, waiter or waitress, baby sitter, casino worker, but the percentages for the women go down over the two subsequent summers.

One may assume that most of the activities just listed are not primarily educational in character, nor is real financial need an incentive in many cases, but they seem to have a major root in our social ideology which stresses the value of work and the making of money for their own sakes and another root in our psychological disposition which makes keeping busy an important security device. But it must also be considered that making one's own money is for the students an important means in their growing independence from their parents. We were impressed in our interviews how heavy the sense of owing to their parents because they put them through college weighed on many students.

There is, however, one category of summer activities that is educational in character and that we coded as "semi-professional apprenticeships." Included in this category are all occupations which require a certain amount of skill and can be considered as the lower step towards a given profession. Fifteen per cent of the Stanford and Berkeley men were engaged in such jobs in the summer after their freshman year and between 3% and 7% of the women. By the third summer 20% of the Stanford and 26% of the Berkeley men were engaged in such jobs, while percentages for the women had risen to only between 7% and 11%. Thus during their last summer before graduation only relatively small portions of the students engaged in work that may have bearing upon their occupational choice.

It is interesting to note that there is little difference between Stanford and Berkeley in the nature of the summer jobs held by their students. There is also little difference over time. The distribution of jobs in the summer after the junior year is nearly the same as that in the summer after the freshman year, with the exception that for the men there is a decrease

decrease in general labor jobs and an increase in semi-professional jobs.[41a]

Stanford Overseas

For the Stanford students, attendance for two academic quarters at one of the overseas campuses is one of the most important experiences.[42]

> Thirty-one per cent of our men and 53% of our women respondents went to an overseas campus.[43] Thirty-three per cent of the men and 46% of the women said that being overseas had great influence on them.[44]

[41a] In a pilot study of male Berkeley and Stanford interviewees reporting on their summer experiences, Barry Sokolik found that people who make different uses of their summers differ significantly on several personality scales. His data suggest that while some students may be predisposed by their personality to make a more autonomous use of the summer, others may need the help of institutional arrangements. Mr. Sokolik suggests that "Universities might allow students holding jobs to live in coeducational dormitories during the summer and provide appropriate educational arrangements. Or universities might arrange for community projects headed by professors or student personnel staff and, where appropriate, sponsored by local businessmen, government, or other agencies."

In spite of its importance, the summer experience has gone unstudied. Barry Sokolik reports that "a search of the Education Index and the Psychological Abstracts from 1950 to the present failed to produce even a single relevant study concerned with the nature or function of the summer experience for college students--except for studies concerning summer school."

[42] A group of 40 men and 40 women goes to a common overseas residence and are taught by Stanford professors and specially hired native instructors.

[43] SQ 4.

[44] Unfortunately we asked for the influence of "being overseas" instead of "being on an overseas campus." Some, therefore, must be referring to overseas experiences other than campus residence. But it is plausible that most of them meant overseas campus residence when one compares the Stanford with the Berkeley figures. Only 5% to 8% at Berkeley assign great influence to having been overseas. (Berkeley has a numerically much more restricted overseas program.)

What, in particular, did they get out of it? In their interviews with us the students said regularly that one of the important aspects of their overseas residence was the opportunity it afforded for establishing meaningful relations with members of both sexes and that these relations did continue even after the group returned home. Similarly, in a dissertation by Emily Stevens Girault,[45] 16% of the students interviewed before departure for a Stanford overseas campus gave establishing friendships as one of the anticipated outcomes. Sixty-six per cent of the students interviewed six months _after_ return from an overseas campus listed friendships among the outcome. Of a third group, interviewed 18 months after return from their overseas campuses, 80% did so.

The overseas campus is a natural demonstration of some of the conditions of establishing meaningful and growth-producing relations between people: a common purpose so that members of the groups can help each other; ease and informality of meeting (in contrast to the dating system); and a mixing of different kinds of people in a non-threatening way. In addition, there is on the overseas campuses the commonality of the academic program and greater leisure than on the home campus (only four days of classes). (During the period of our study the students have, however, been pressing consistently for their overseas courses to relate more fully to their overseas experience.)

One may also raise the question of the "safety valve" value of overseas residence. Given the students' restlessness, their desire to travel and their frequent or occasional dissatisfaction with college life, looking forward to two quarters of residence abroad may well inhibit unrest. When the students return, the time until graduation is much shorter and the memories of their overseas stay vivid and pleasant enough to make it seem less worthwhile to press for changes. At the same time, the overseas experience sharpens many students' perceptions of their home institution and leads them to voice criticisms.

Relations with Peers

As we have seen repeatedly, their relations with their fellows are of great importance to the students. They enjoy them and attribute to them great influence on their development. They also find them a source of strain and suffering. At the end of their college years many students expressed the wish that they might have been able to establish even more meaningful and intense and less self-conscious relationships. In an area as deep as relations with other people one must expect many complexities and levels of feelings.

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[45] _Effects of Residency at an Overseas Campus on Some Social Attitudes of Stanford Students_. Unpublished doctoral dissertation, Stanford, 1964.

> In the Senior Questionnaire between 40% to 50% said it had become much less difficult for them to feel close to people.[46] (Only between 14% and 21% report that it has become slightly more difficult or much more difficult.) Very few, 6% or less, say that during their college years they have not had any close friends on whom they both had a significant influence and who had a significant influence on them.[47]

The picture of progressive ease in social relationships is also borne out by the periods the students single out as difficult or easy socially.

> The period of the greatest difficulty is the freshman year and a decisive break towards a good social life seems to come for about half of the men and over a third of the women in the spring of their junior year or the fall of their senior year.[48] Fifty-one per cent of the Stanford men and 39% of the women report their freshman year as the most difficult socially.

The discrepancy might be explained by the Stanford sex ratio of 2-1/2:1. But given this ratio the discrepancy is small and it is noteworthy that at Berkeley with roughly a 1:1 sex ratio, 43% of the men and 42% of the women declare their freshman year particularly difficult. It is to be kept in mind that social difficulties do not include only relations with the other sex. The dormitory experience, the encountering of hordes of strangers, many of whom seem more accomplished than oneself, is a rather sharp transition from one's own relatively protected home.

While the women report less social difficulty than the men for their freshman year, the men report greater ease than the women for the end of their junior and senior years. This may indicate in part that the men's social development is slower. But it also may be an indication that "difficulty" and "goodness" in social relations may mean different things to the two sexes. The men may refer to their greater ease in obtaining and entertaining dates, while the women are beginning to look for greater depth of relationship and marriage partners.

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[46] SQ 27; [47] SQ 26; [48] SQ 34.

> The increasing proximity of the two sexes is also reflected in the fact that by the middle of their senior year about one half of the men and two thirds of the women report that they had been going steady during college.[49] About a sixth of the men and a quarter of the women are engaged or have been engaged. Eight per cent of the Stanford and Berkeley men, 8% of the Stanford women and 13% of the Berkeley women are married.

The picture of relative interpersonal serenity that has been conveyed by several of the data just cited seems to be further confirmed by the fact that few students report themselves as having frequently seriously disagreed with or taken a different attitude from their friends.

> Twelve per cent to 21% said they had seriously disagreed with or taken a different attitude from friends of the same sex, and 10% to 18% in regard to friends of the opposite sex.[50] Between 23% and 34% said that during their entire college career two or more friendships had either broken up or been severely strained.[51] Thirty-six percent to 53% said this never occurred.

But the relatively low incidence of disagreement and conflict may betoken not so much the peacefulness of social relationships as their relative superficiality. If one considers (1) the student's turbulent development during late adolescence, his shaky identity and struggle for self-definition, (2) the situational factor of his being exposed to many different and dissonant peers, and (3) his just beginning to try himself out in new heterosexual roles and new types of friendships closer to the adult model, if one considers these tests and the inevitable mistakes they involve, the vagaries of impulse, the hazards, the hopes, and the fears, one might have expected a much larger number of students to experience break-ups, strains, disagreements, or at least strong feelings of difference. There are indications that these feelings exist, but they are glossed over by a compelling sense that they must, if possible, never be expressed. In our interviews with us the students exhibited deep resistance even to admit negative feelings about others and in their behavior we often found that they would go to great lengths of inconvenience or pain before they would dare to tell a roommate about some habit or behavior of his that would greatly interfere with their studying, sleeping, or other purposes. Thus, they might prefer to walk every night to a distant study room on campus before facing up to a "criticism" of their roommate.

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[49] SQ 35; [50] SQ 57; [51] SQ 29.

This resistance to admitting negative feelings about others at the same time prevents them from finding out more fully what they feel and want, a precondition for establishing a relationship with others which is based on self-respect and avoids resentment or self-sacrificialness. The apparent smoothness of relations with others thus in part seems bought at the price of developing a more profound self-definition. It is also bought at the price of the selection of inappropriate peers or partners for closer relationships. The progress of students during the college years in mutual tolerance and in ease and graciousness of social behavior must be viewed in the light of this loss. College as a socialization agency contributes to the education of people towards that "consensus" which is a specially marked characteristic of American social and political behavior. Such "consensus" training at the moment seems to inhibit differentiation and assertiveness of personality.

Our hesitations about the depth of the students' relationships to each other are supported by their responses to our question whether in college they had found one or several friends with whom they had a deep meaningful and lasting relationship.[52]

> Fifty per cent of the Berkeley men said that they were not sure or had not found such a relationship with members of the opposite sex and 34% said it about members of their own sex. The figures are lower for the Stanford men (37% and 22% respectively), and lower for the women (23% of the Berkeley and Stanford women for the opposite sex and 18% and 12% for their own sex.)

These figures seem to indicate in many students themselves a sense of lack in their relations with others.

Is the capacity for having friends such that those who have it will tend to make friends with members of both sexes? Table 6 indicates that this tends to be so. People who have close relations with members of the same sex tend to have close relations with people of the opposite sex. People who have close relations with the opposite sex are even more often also intimate with members of their own sex. Those men who report themselves as not having found close friends of their own sex, or being unsure about it, also report themselves much more frequently as not having found close friends of the opposite sex. But this is not true for the women. In other words, a man who does not have friends of his own sex is two thirds of the time not likely to have friends of the opposite sex. The women also have a much more pronounced tendency than the men to be intimate with members of both sexes and the women rarely (4% and 8%) are not intimate with either sex (Table 7). There also seems to be a tendency for more men than women to be intimate with their own sex alone.

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[52] SQ 28.

Table 6

Intimate Friendships of Students Who Are and Who Are Not Intimate with Members of Their Own Sex

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
Percent of those intimate with same sex, who are also intimate with opposite sex	69% (148)	80% (148)	60% (108)	81% (176)
Percent of those intimate with opposite sex who are also intimate with same sex	87% (148)	89% (148)	76% (108)	86% (176)
Percent of those not intimate with same sex who are also not intimate with opposite sex	62% (37)	35% (9)	67% (69)	44% (22)
Percent of those not intimate with opposite sex who are also not intimate with same sex	36% (37)	19% (9)	49% (69)	37% (22)

Table 7

Intimate Friendships with Members of the Same and of the Opposite Sex (1)

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
Intimate with the same and the opposite sex	54% (148)	70% (148)	38% (108)	66% (176)
Not intimate with the same and the opposite sex	14% (37)	4% (9)	24% (69)	8% (22)
Intimate with the same but not the opposite sex	24% (66)	18% (38)	26% (72)	15% (39)
Intimate with the opposite but not the same sex	8% (22)	8% (17)	12% (34)	11% (28)
	100% (273)	100% (212)	100% (283)	100% (265)

On the basis of some observations, we had assumed that there would be a tendency for the men in particular to seek out women rather than men when they wished to express their deeper feelings and wished to engage in self-revelation and self-exploration. We thought that among other things the frequently observed fear of homosexuality in men would be a barrier to intimacy between them. The figures in Table 7 point only to a small percentage to whom this may apply. Only 8% to 12% of the men say they have close friendships with the opposite sex only. However, more detailed investigation might uphold our hypothesis _if_ it turns out that there are different definitions of intimacy in regard to the different sexes. It is also worth noting that between 22% and 36% of the men report no close friendships with other men during college (Table 8).

Table 8

Intimate Friendships with the Same and the Opposite Sex (2)

	Stanford Men N = 274	Stanford Women N = 214	Berkeley Men N = 284	Berkeley Women N = 266
Intimate with the same sex	78%	87%	64%	81%
Intimate with the opposite sex	62%	78%	50%	77%
Not intimate with the same sex	22%	12%	36%	19%
Not intimate with the opposite sex	38%	22%	50%	23%

While students in college have relatively infrequent relations with adults, they seem to include at least one group of older people in their circle of friends. Somewhat to our surprise we found that only small percentages,

> between 8% and 18%, say that there was _no_ graduate student they had come to know _well_.[53] Instead about a fourth of the students have come to know between one and three graduate students well, about a third, four to ten, about a fifth, ten to nineteen and about a tenth, twenty or more.

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[53] SQ 31.

This availability of the graduate students is worth further exploration. Our impression is that it contributes much to the informal education of undergraduates. (One should compare otherwise similar institutions with and without attached graduate schools.) In our observations of the student activists we have found that graduate students often supplied what the undergraduates were looking for, that is, in the relative absence of such support from faculty and administration, adult support by people who are apparently successful in the academic enterprise, are articulate, and possess a longer time perspective than undergraduates.[54]

We also asked the seniors whether they now had close friends near their own age whom they had known before college.

> We found that about half of the seniors have between one to three close friends of both sexes whom they knew before college and a fairly large number have four or more such friends.[55] Males tend to have more male friends and females more female friends from their pre-college days, but between 46% and 60% have retained close friends of the opposite sex.

We have assumed that friendships would be much more a function of the environment, that with the shift to college old friendships would dissolve, and that by the senior year most of the pre-college friendships would have been more or less silently ended. Our data point to greater premanence than we had expected.

Finally, the importance of social relations to the student is also underlined by the fact that

> close to two thirds (57% to 63%) find only moderate enjoyment in being along.[56] Twenty-three per cent of the Stanford men and 14% of the Berkeley men, 37% of the Stanford women and 23% of the Berkeley women say that they find very much enjoyment in being alone. At the opposite end of the question, 14% of the Stanford men and 22% of the Berkeley men, 6% of the Stanford women and 17% of the Berkeley women say they find very little enjoyment in being along.

There is here an interesting difference both between the schools and between the sexes.

According to developmental theory achievement of a relatively stable identity is a condition of forming adequate relations with other people. Enjoyment of self and enjoyment of others would be correlated. Table 9 indicates more men who have close male friends enjoy being alone than those who do not. For the women the picture is the reverse. It is to be taken into account that about half as many men as women have no close friends of the same sex and that hence we are not dealing with strictly comparable groups. Moreover, the reasons for the enjoyment of being alone are probably quite diverse. The enjoyment may spring from fear or hostility to others or from inner security and resourcefulness. As our question did not discriminate between the two, we can only note, on the one side, that men and women who have intimate friends of the opposite sex are evenly matched with those who do not have intimate friends in their enjoyment of being alone, and, on the other side, that intimate friendship and great enjoyment in being alone are compatible for 17% to 29% of those who have intimate friends of either sex.

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[54] See Katz, Joseph and Nevitt Sanford. Causes of the Student Revolution. Saturday Review, 48, (December 18, 1965), 64-66, 76, 79.

[55] SQ 32; [56] SQ 30.

Table 9

Great Enjoyment in Being Alone Among Those Who Have

	Stanford & Berkeley Men	Total N	Stanford & Berkeley Women	Total N
Same sex close friends	21% (82)	395	28% (111)	402
No same sex close friends	13% (22)	163	42% (32)	76
Opposite sex close friends	17% (63)	372	29% (107)	370
No opposite sex close friends	16% (39)	244	30% (33)	109

Sex

We now turn to the sexual aspects of social behavior and attitudes and to the developing attitudes toward marriage. The data on sexual attitudes and behavior are rather parallel to those on social attitudes and behavior already reported.

> The students say that during their college years their sexual impulses have become increasingly more acceptable to them.[57] Only 13% or less express a contrary opinion. By their senior year less than a third of the senior men and women disagree with the statement that full sexual relations are permissible to the male before marriage;[58]

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[57] SQ 44; [58] SQ 40.

> and only between 9% and 16% disagree strongly. About a third say that during college they have reached a high degree of physical intimacy.[59] Between 15% and 33% say their degree of physical intimacy has been low. The women report both more conflict in regards to sex and having achieved a greater amount of acceptance of it. They also report a low degree of physical intimacy considerably less often than the men.

Despite the differences in the students' backgrounds, at Berkeley and Stanford their differing sex ratios, and the differences in social opportunities, the figures for both institutions are remarkably parallel (including frequency of dating which will be reported later).

It has already been reported that the women tend to make close friends of either sex more frequently than the men. As much as 50% of the Berkeley men have found no close friends of the opposite sex and 38% of the Stanford senior men have not done so (Table 8).

What are the students' attitudes to heterosexual relations and what changes have taken place over the four years? Table 10 gives an indication by listing student responses to items about sex contained in some of our personality scales. Very high proportions of seniors say that they think about sex often, take pleasure in various activities relating to sex, do not think that sex is objectionable, or that there is widespread sexual misconduct. They approve of premarital intercourse, intermarriage between the races, and of abortion. They think that women ought to have as much sexual freedom as men.

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[59] SQ 41.

Table 10

Senior Attitudes to Sex

(Items endorsed by 60% or more of the seniors.)

		Stanford Men (N=185)	Stanford Women (N=148)	Berkeley Men (N=286)	Berkeley Women (N=265)
"I seldom think about sex."	FALSE	98	96	97	91
"I am embarrassed by dirty jokes."	FALSE	96	73	93	71
"I never attend a sexy show if I can avoid it."	FALSE	93	79	88	71
"No man of character would ask his fiancee to have sexual intercourse with him before marriage."	FALSE	88	86	86	78
"There is nothing wrong with the idea of intermarriage between different races."	TRUE	80	74	79	77
"In illegitimate pregnancies abortion is in many cases the most reasonable alternative."	TRUE	78	64	71	60
"I believe women ought to have as much sexual freedom as men."	TRUE	77	57	76	60
"I dislike women who disregard the usual social or moral conventions."	FALSE	77	77	74	73
"A large number of people are guilty of bad sexual conduct."	FALSE	66	67	63	63

Dramatic changes take place in the attitude to premarital sex between the freshman and the senior years (Table 11), with both men and women moving towards acceptance or even advocacy of premarital sex.

In the senior questionnaire 69% of the men and 60% of the women said they believed that full sexual relations are

Table 11

Differences in Freshmen and Senior Attitudes to Sex

(Percentages are of those answering TRUE. The same people are responding as freshmen and as seniors.)

	Stanford Men (N=185)		Stanford Women (N=148)		Berkeley Men (N=286)		Berkeley Women (N=265)	
	Fr.	Sr.	Fr.	Sr.	Fr.	Sr.	Fr.	Sr.
"No man of character would ask his fiancee to have sexual intercourse with him before marriage."	52	11	52	11	47	13	54	21
"A large number of people are guilty of bad sexual conduct."	70	33	63	30	67	35	67	35
"In illegitimate pregnancies abortion is in many cases the most reasonable alternative."	45	78	42	64	46	71	24	60
"I dislike women who disregard the usual social or moral conventions."	51	22	59	20	46	24	55	26
"People would be happier if sex experience before marriage were taken for granted in both men and women."	33	60	18	45	41	63	18	51
"There is nothing wrong with the idea of intermarriage between different races."	59	80	67	74	67	79	56	77
"I never attend a sexy show if I can avoid it."	24	6	41	19	30	11	51	28
"I believe women ought to have as much sexual freedom as men."	61	77	32	57	59	76	35	60

permissible to the male before marriage.[60] A fourth of the men and more than a third of the women stated that their sexual impulses had become greatly more acceptable to them during college, and with the exception of about 13%, all the rest declared them to have become moderately more acceptable.[61]

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[60] SQ 40; [61] SQ 44.

In addition, many more seniors than freshmen are not set aback by unconventional behavior in women, are in favor of sexual equality, intermarriage, abortion, and otherwise take a freer and less censorious attitude to sex and sex-related activities.

These changes did not come about without struggle.

> Only a third of the men and between 15% to 24% of the women say that during their college years their attitudes towards sex have little involved them in a struggle of conflicting thoughts and feelings.[62] The rest report either moderate or great struggle. A third of the women report great struggle. Between 52% to 64% report moderate or great difficulty in controlling their sexual impulses during college.[63]

Data to be presented later indicate that the higher the degree of intimacy reached, the greater the intervening struggle. There is a lessening of the moralistic outlook. For instance, about two thirds of the freshmen men and women said that a large number of people are guilty of bad sexual conduct. This drops to one third for the seniors and is one of many pieces of evidence we have that sex and guilt are becoming more dissociated from each other.

There is some difference between men and women in sexual attitudes. Often the difference is one of degree of endorsement. For instance, both men and women move toward endorsing sexual equality or advocating premarital intercourse, but the women do so in smaller proportions. Hardly any men say that they are embarrassed by dirty stories, but about a quarter of the senior women say so (Table 10). About two thirds of the men say that they like to talk about sex, only half of the women say it (Table 12). Less women than men say that when a man is with a woman, he is usually thinking about things related to her sex. (A third of the senior men still think so, that is, seem to think of women primarily as "sex objects.") Strikingly different endorsements are given to the item "There was a time when I wished that I had been born a member of the opposite sex." Between 12% to 15% of the senior men agree and between 40% to 55% of the senior women do. This response may be influenced by the possible fact that it is harder for the men to admit this wish (because of fear of the charge of homosexuality) and that men may be less aware of their feelings in this area than women. But the response also may lend support to those who claim that envy of the male sex and "phallic" strivings are a frequent female characteristic.

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[62] SQ 42; [63] SQ 43.

Table 12

Differences in Attitudes to Sex of Men and Women Seniors

	Stanford Men (N=185) %	Stanford Women (N=148) %	Berkeley Men (N=286) %	Berkeley Women (N=265) %
"There was a time when I wished that I had been born a member of the opposite sex."	12	55	15	40
"People would be happier if sex experience before marriage were taken for granted in both men and women."	60	45	63	51
"I am embarrassed by dirty stories."	4	25	6	28
"I believe women ought to have as much sexual freedom as men."	77	57	76	60
"I like to talk about sex."	62	46	64	51
"When a man is with a woman he is usually thinking about things related to her sex."	34	19	36	20

To what extent is frequency of dating associated with movements towards greater heterosexual intimacy? For the men in our samples the frequency of dating increases considerably between their freshman and senior years.

> Over half of the Stanford and Berkeley men said they had no evening dates in an average week during their freshman year.[64] By the senior year about a third of the men report no evening dates. While only about 12% of the men date two times or more per week as freshmen, about a third of the seniors did so.

But mere frequency can be misleading and the extent to which dating facilitates intimacy is open to question. (In a sense dating is an equivalent of the chaperone system. It allows for some indirect expression of the sexual impulse while at the same time inhibiting it.) As we reported earlier, our interviews with the Stanford overseas students indicate that opportunities for more informal contacts and participation in common tasks seem superior avenues towards better acquaintance and eventual intimacy.

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[64] SQ 36. Because of inaccuracies in the key punching of this item the data about frequency of college dating are to be taken as approximations.

The dating behavior of the women tends to support what we have just said. While as we have seen, there are many indices of increased intimacy, the actual frequency of dating remains fairly stable.

> About a quarter of the women report no dates in an average freshman year week. About a quarter report no dates for an average senior week. The increase in the amount of dates per week also is less than for the men. Forty-seven per cent of the Stanford women and 37% of the Berkeley women date two or more times per week in their freshman year, 54% and 47% do so as seniors.

In the interviews we learned that many freshmen women engage for a period in rather "promiscuous" dating, often to convince themselves that they are desirable though intellectual. After they have gained reassurance they turn towards fewer dating partners and eventually move toward a closer relationship with one man.

How do sexual attitudes and behavior in college relate to previous development?

> About 60% of the women and about 35% of the men report that they first began taking a more intense interest in sexual matters between 17 and 21.[65]

There is other evidence that interest in sex does not seem to correlate with onset of the physical signs of puberty. We asked the women to indicate their age at the time of their first menstruation and the men to indicate their age at the time when they first underwent voice changes, body hair growth or other signs of the onset of puberty.

> Over 50% of the men and 75% of the women said this happened between 11 and 13.[66] But only about 17% of the men and 9% of the women said they began first taking a more intense interest in sexual matters between 11 and 13.[67] It also appears that for the bulk of the men students, about 67%, the onset of puberty is between 12 and 14 and for the women between 11 and 13.

It appears from the above data that while the women develop physically somewhat earlier than the men, large proportions of them take a more intense conscious interest in sex later than the men.

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[65] SQ 37; [66] SQ 39a,b; [67] SQ 37.

At the same time it appeared in our interviews that the women had achieved a more mature orientation to sex, that is, they seemed to be more aware of the psychological complexity of sex and to think of members of the other sex more as individual people than as filling stereotypical roles. Perhaps, once the women take strong interest in sex they do so in a fairly sophisticated manner, while for the men the integration of sex with the rest of their personality is a longer and more gradual process. Possibly, at least in our society, there are discrepancies in this regard between many men and women throughout life.

There are fairly large numbers of students, roughly a third of the men and a quarter of the women, who seem to date little or not at all even as college seniors.[68] Similar percentages obtain for infrequent dating in high school. (Between 24% and 39% of our respondents said they had dated no more than twice a year during their last two high school years.[69]) It is of special interest that in spite of the very favorable male-female ratio at Stanford, over a fifth of the women students seem to have no dates in an average week in any of the four college years. Are we possibly here dealing with a sizable group of fairly lonely people--who may deserve some special attention?

Other analyses of the data indicate that while men who dated little or not at all in their last two years of high school tend to date little as college freshmen, this is less the case for the women. Of those who do not date as college seniors, over 50%, and perhaps as much as 75%, dated not at all or once or twice a year during their last two years of high school.

By the middle of their senior year slightly less than a third of the men and women students report themselves as having reached a high degree of physical intimacy.[70] The interview data support the senior questionnaire data. By the middle of the junior year more than a third of our male interviewees and a quarter of the female ones have had experienced sexual intercourse (Table 13).[71]

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[68] SQ 36, see footnote 64; [69] SQ 33; [70] SQ 41.

[71] To help determine the accuracy and meaning of the students' self-reports of their degree of sexual intimacy, we checked the questionnaire responses against our interview data which contain much more substantial information about sexual behavior. About 20% of the seniors who reported themselves as having reached a "high degree of physical intimacy" had not had coitus during college - at least as far as our data showed. At the same time 39% of the men and 13% of the women whom we knew to have had intercourse reported the degree of their sexual intimacy only as moderate. Caution must be used because these two computations are based on small numbers (two groups of 40 and 39 people respectively). But they suggest the possibility

(Footnote continued on page 62.)

Table 13

Experience of Sexual Intercourse by Middle of Junior Year
(Interviewers' Report)

	Stanford Men (N=47)	Stanford Women (N=39)	Berkeley Men (N=41)	Berkeley Women (N=39)
Yes	36% (17)	23% (9)	39% (16)	26% (10)
No	60% (28)	62% (24)	61% (25)	72% (28)
Information uncertain	4% (2)	15% (6)	---	2% (1)

What is the relationship between sex and morality? Our data indicate that by their senior year between 45% to 63% of the students think that people would be happier if premarital sex were taken for granted and even larger percentages approve of premarital sex and even abortion. But this liberalism does not mean that sexual conduct is not guided by moral standards. Our interviews show that students know each other for a protracted period of time before they engage in intercourse. Their relationship is a meaningful one and often the partners seriously think of marriage and do get married. If there has been a shift recently in sexual morality - which is difficult to determine in the absence of sufficient data in previous decades - one might say that it means not so much a decline of moral codes as a change in their contents; so that for large segments of college youth premarital sex is consistent with morality and behavior ruled by principles of responsibility and concern for others. The thesis that heterosexual behavior is guided by moral standards is also borne out by the distinction students make between extra-marital and premarital sex. Much fewer of them thought the former acceptable. Presumably a moral principle (fidelity) is violated in the one but not in the other (Table 14).

(Footnote 71 continued) that for the senior women the percentages reporting high degree of physical intimacy are about the same as the percentages of those who have experienced coitus in college while for the men the percentages of those who have had intercourse are higher than those who report a high degree of physical intimacy. Table 10 also supports this inference.

Table 14

Strong Acceptance of Premarital and of Extramarital Sex by College Juniors
(Interviewers' Ratings)

	Stanford Men (N=44)	Stanford Women (N=36)	Berkeley Men (N=39)	Berkeley Women (N=39)
Premarital sex	34% (15)	28% (10)	41% (16)	27% (10)
Extramarital sex	11% (5)	3% (1)	13% (5)	10% (4)

Our interviews corroborate Ehrmann's[72] finding that for the females sex and affection are more closely associated than for the males. The percentages of women for whom sex and affection are closely linked is nearly double that of the men (Table 15). However, at least part of this discrepancy might be explained by the developmental and career lag of the men previously referred to. Fuller integration of sex and affection may come later for them.

Table 15

College Juniors for Whom Sex and Affection are Strongly Linked
(Interviewers' Ratings)

Stanford Men (N=39)	Stanford Women (N=36)	Berkeley Men (N=40)	Berkeley Women (N=36)
48% (19)	86% (31)	32% (13)	63% (23)

Other data support the thesis that physical sexual activity alone is not strongly desired by the students.

> In our list of fourteen interests and activities, only between 7% and 17% of male and female students rank sexual needs among the three most important.[73] (Similar responses were given to our list of eleven human needs.)

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[72] Ehrmann, Winston. Premarital Dating Behavior. New York: Bantam Books, 1960. Our interviews also corroborated Ehrmann's conclusion that both sexes are more lenient in their attitudes about what is permissible heterosexual behavior for peers than for themselves.

[73] SQ 74.

Some denial of sex is probably involved in these responses, given the students frequent talking and thinking about sex. But compare their response about sex to that about love and affection which is ranked by between 42% and 74% as among the three most important.[74]

Our data also show that students who report a high degree of physical intimacy have a long history of frequent dating stretching back to high school (Table 16).

Table 16

Dating History and Some College Activities of Stanford Students High, Middle and Low in Sexual Intimacy

	Low		Middle		High	
	Men (N=74)	Women (N=29)	Men (N=113)	Women (N=107)	Men (N=81)	Women (N=64)
Less than 2 dates a year in last two years of high school	49%	59%	17%	25%	10%	29%
More than one weekly evening date:						
Freshman year	7%	10%	7%	52%	22%	56%
Sophomore year	11%	10%	27%	52%	44%	58%
Junior year	4%	24%	48%	67%	47%	66%
Senior year	12%	28%	53%	60%	49%	64%
High frequency of social activities in college	20%	21%	57%	57%	59%	56%
Drinking beer daily or 1 or 2 times a week	31%	14%	56%	31%	64%	38%
Drinking hard liquor daily or 1 or 2 times a week	7%	10%	31%	22%	33%	17%
Never drunk during senior year	59%	79%	22%	55%	21%	38%
Great struggle over sex	15%	21%	27%	32%	11%	50%

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[74] It is possible that institutions such as the two we have studied which attract men of high "verbal" ability may thus select men less defensive in regard to their own "femininity." Hence other student male populations may show greater separation of sex from affection.

For a discussion of the role of sex in the specific developmental phase of the student see Sex and the College Student. New York: Group for the Advancement of Psychiatry, Report Number 60, 1965. The report also describes varying college policies and suggests guidelines for college policies toward sexuality.

The rather sparse dating history for those who are low in physical intimacy suggests that they tend to refrain not only from sexual contact but from other association between the sexes. Table 16 shows also that those high in physical intimacy also tend to drink beer and liquor more frequently than those low; their greater freedom of expression in the sexual sphere seems to be correlated with greater freedom of impulse expression elsewhere. It is of interest also that women high in physical intimacy report great struggles concerning sex while the men do not. This greater struggle may in part be due to the fact that adult social feelings about premarital intercourse are more strict for women than for men and that, with the possibility of pregnancy, the consequences of intercourse are more portentous for them. It may also be due to these young women having a psychologically more complex understanding of sex.

Our investigations do not confirm the popular stereotype of widespread sexual promiscuity. Sexual intimacy where it occurs takes place in the context of a relationship that is serious rather than casual. Sexual behavior, moreover, is governed by a moral code which, however, in contrast to the "official" code, allows for premarital intercourse. Students' interest in the opposite sex has physical contact only as one component. Establishing more communicative relations often is uppermost on their conscious agenda. We have found that administrative and faculty caretakers of students often do not see the students' search for greater psychological intimacy in the proper perspective when they view student demands as primarily "sexual" in nature. Our interview experience has also taught us that beneath a layer of "coolness" the students still carry many anxieties concerning their sexual attitudes and behavior. As we have indicated before, the whole area of relations with other people contains much that is only partially resolved in college. In the sexual sphere, too, if we can be subtle and understanding enough, colleges can be more helpful to their students. This is of particular importance because sexual attitudes and behavior are so closely linked to choice of a marital partner.

Qualifications of Future Spouse

As we have indicated, women's interest in sex seems to develop later than the men's, but reaches a more fully developed state during college; many men seem less ready than the women to assume full heterosexual roles. The men participate in smaller proportions in the activities that may be deemed preparatory for marriage.

> Two-thirds of the women and half of the men have gone steady during college, a quarter of the women

and one-seventh of the men have been engaged.[75] (Around ten per cent of the men and women are married before graduation.) The men's lesser readiness for commitment is also expressed in the fact that about half of them say that they expect to get married at age 25 or beyond, while only a quarter of the women say so.

But there is great agreement between men and women in many of the things they expect in marriage. Men and women agree about the number of children that they expect to have. Very small percentages want to have less than two children.[76] About a quarter want two children and about 40% want three, between a fifth and a quarter want four or more children. There is remarkable agreement between men and women about the wife's working after marriage. About three quarters of the men and women expect the wife to work full-time before there are children.[77] The same proportions, three quarters, do not expect the wife to work while the children are under six. About half do not expect the wife to work while the children are between 6 and 12. But only 17% of the men and 19% of the women do not expect the wife to work after the children are older. At that time about 45% of the women expect to work full-time and 42% part-time, and the men tend to agree.

Differences seem to arise in the area of underlying feelings and attitudes. About half of the men and women agree that a husband should control his wife, while the other half is either neutral or undecided.[78] However, when asked whether they would prefer to have the spouse or themselves to have priority when it comes to making decisions, 82% of the women say that they would prefer to have their husbands to have priority while only about 60% of the men say so.[79] In other words, more women expect their husbands to have control than there are men willing to assume it. Other indications of women looking for more authoritative control comes from the response of 44% of the senior women who say they like men of whom they are a bit afraid and from one third of them saying that they are strongly attracted to older members of the opposite sex. We already referred to the fact that much larger percentages of women than of men say they wish they had been born a member of the opposite sex.

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[75] SQ 35; [76] SQ 46; [77] SQ 47; [78] SQ 49c; [79] SQ 48.

The issues to which these responses point are intricate and complex. The women's desire for "control" ought not crudely be interpreted as a desire for domination. Some of the women may well desire it. But many others may be calling for decision-making and protective responsibility by males which lie outside of the sphere of submission or domination. The hard battle of the last hundred years for equality of the sexes has obscured the search for non-invidious differences between them. Our data point into the direction of such differences in that women may expect a leadership from their men that many men, at least in their college senior year, are not ready to give.

Parents and Home

A student's life in college is influenced by his past education at home and his developing relations with his parents. We have already described the occupational background of our students' parents. In turning to the psychological background we note first that on the whole our students' lives have been affected only infrequently by obviously adverse external circumstances.

> Only 3% or less do not have their mother and 8% or less do not have their father living (with the exception of the Berkeley women where it is 13%).[80] Eight per cent or less say that their parents are divorced. There are, however, more parents than one might expect whom the students report as having a serious drinking problem. Between 4% to 7% of the fathers and between 1% to 5% of the mothers are so characterized.[81]

When the students describe their parents' lives with each other, the general tone is one of mildness.

> Only small percentages describe their parents lives together as either overdependent or isolated from each other.[82] Only between 21% to 33% say that in the years before they entered college, their parents differed sometimes strongly from each other in their views. More than a majority say that important decisions at home are usually made by both parents acting together. About a third of the men and only a fifth of the women say that important decisions at home were usually made by father.

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[80] SQ 52; [81] SQ 24.

[82] For this and what immediately follows see SQ 54, 55.

Does this difference between the men's and the women's responses mean that some men have a greater need to believe that their fathers make the decisions? Do some of the women have an opposite need or are they simply better observers?

> Only very small percentages say that as a child, before the age of 13, they were punished frequently. Two thirds or more say they were punished occasionally and between a quarter to a fifth say they were never or almost never punished. Close to two thirds were punished by both parents. (More girls than boys were punished only by their mothers and more boys than girls only by their fathers.) The most effective form of punishment (described by the students in response to an open-ended question) was verbal punishment, i.e., scolding, lecturing, reasoning, verbal expressions of anger and disappointment. The women list verbal punishment more frequently than the men, and they list verbal punishment three to four times more often than physical punishment, while the men list physical about as often as verbal punishment. A frequently listed punishment is denial of an object, activity or privilege.
>
> Students divide nearly evenly between those who say they resemble the parent of their own sex in emotional make-up and those who say they resemble the opposite sex, but more men than women describe themselves as resembling the parent of their own sex.[83] (About 55% of the men and 45% of the women say they resemble father, 41% of the men and 49% of the women say they resemble mother.)

From the interviews we know that the parent a student says he resembles may not necessarily be the one with whom he identifies at deeper levels of his personality, but it is interesting that at this more conscious level students tend to pick a parent regardless of sex.

The mildness of the description of the parents is not surprising to us in the light of the information we obtained in the interviews. It is first of all difficult for students to talk about their parents with adequate openness. Assessment and criticism are easily confused in their minds. (In their last senior interview many students told us that their sexual behavior and their parents were the two topics that it was particularly difficult to talk about.) We already noted that it is difficult for many students to admit to having such emotions as anger or hostility or to admit their existence in people close to them. Some of them, even when they suspect disagreement among their parents, describe it as taking place out of their hearing.

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[83] SQ 56

At the same time our impression from the interviews is that openness of disagreement at home is a helpful factor in people's development. If father and mother are open about their differences, it teaches the child that good people can legitimately differ and it frees him to differ too and explore his own ways. Obviously there are optimal degrees of disagreement. Where, as in the lives of some of our interviewees, disagreement was persistently hostile, the child came to embody parts of both contending parents in himself resulting in a persistent conflict within himself.

The process of separation from home is a long one. Our impression is that many students are ready to leave home one or two years before college starts. There seems to be an intensification of the process of separation in the summer before the freshman year and students begin taking leave while still at home. Then, entering college, with its overpowering demands, brings a temporary intensification of dependence ("homesickness"), often not consciously admitted. The summer after the freshman year is for many a major turning point in the struggle for independence. The students have now been away from parental supervision and guidance for a year. They have not only survived but grown. Parents tend to act the same way they did before and thus seem out of step, lacking in respect for the new person that is discovering himself. Often the ostensible battles between parent and student are around relatively trivial issues, such as what hours to be home at night, but the underlying issue is the student's attempt of achieving self-regulation. The student usually wins the battle and reports much less of a repetition of the friction the following summer. (Do their parents give in or do they get truly educated or something of both?) The relative triviality of the stated issues is probably an obstacle to the achievement of full autonomy as it hinders a more deliberate and aware striving after a differentiated identity.

College is for most people the time of greatest exposure to different viewpoints on a wide variety of subjects and emphasis on proper marshaling of evidence. This new outlook and methodology becomes for many another source of disagreement with their parents, particularly with their fathers. Many students in the later college years report difficulty in talking with fathers, particularly about political issues, because, they say, he gets too emotional and does not have a keen sense of what is appropriate evidence. One may assume that these debates are not entirely innocent and that the student is likely to pick the topics he knows his parents are sensitive about. (It requires the parent's as well as the college administrator's wisdom not to be shaken out of his equilibrium by the student's semi-conscious provocativeness. It may help them to realize that autonomy is often bought at the price of some rebelliousness.)

When reviewing their years at college many students view their separation from home as very beneficial to them.

> Between 36% and 48% say that being away from home had great influence on the changes that have taken place in them and most of the rest say it had moderate influence.[84] That their separation from their parents is a serious and prolonged business for many students is indicated by the fact that more than a fourth say that during their college years they have frequently strongly differed from their father.[85] A different, though overlapping fourth say they have frequently strongly differed from their mother.

But apart from such attempts at separation and autonomy as we have just listed, we have been impressed by the large extent to which the students move within the life space of their original family. In their activities during the college years, in their values, in their choice of occupation, the vast majority seem to conform to the behavior and expectations of their own original family. Few define themselves as different from their parents and set out to fashion a different life style for themselves. Much of the domination of the family is unconscious and can in some cases go together with conscious hostility to one or both parents. The lack of awareness was indicated to us in the first freshman interviews when the students told us that their parents wanted them to do whatever the student wanted to do, while further probing revealed that parental expectations were quite definite and known to the students. Most students never reach a clear picture of some of their most binding determinations.

The influence of the family may express itself in different ways. For instance, in the choice of an occupation a student may (1) do exactly what his parent does, e.g., the son of a lawyer plans to become a lawyer; or (2) he may go into a line of work or life style very similar to that of the parents, e.g., the son of a man involved in county politics goes into law with a political orientation; or (3) he may select an occupational life style in accordance with his parents' wishes, e.g., the son of a man who wanted to become a doctor but could not plans to become a doctor himself. In a count of a random sample of 23 interviewees, I found that 18 chose an occupational life style like that of their parents and only five chose one unlike.

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[84] SQ 61; [85] SQ 57.

The interviews also exhibited to us that families differ very much in degree of closeness and this is so regardless of the degree of community of values and attitudes. In many families each of the individual members go their separate ways. Father might be out evenings, working or engaging in some civic function. Mother might be involved in a club or social activity. Even if the members of the family are in the house together in the evening, father might be working away in his shop or in the garden or be watching TV, while mother might be sewing, talking to the children, or go to bed early. Some families engage in common activities at least of a leisure kind such as fishing or spending their vacations together. In some families both mother and father hold jobs in order to put the child through college. When members of the family have close interests in each other it can range from intrusive domineering to affectionate understanding.

Many students transfer the sense of home from the family to the college. After the freshman year they would assert that "Stanford is my home now." The college thus provides a transitional experience and a "weaning" in the passage from the parental home to the home of their own. (But with some students one also wonders whether there is not a superficiality of relatedness so that any group, provided it is ruled by congenial codes, will be satisfactory to them.)

Change in Values

> When asked how they had changed in their moral views, about a fourth of the seniors report themselves as having changed much since they entered college.[86] They respond similarly when asked about changes in their political and religious views. About a fourth report much change in the kinds of friends they have; changes in kinds of friends may be taken as a concomitant of changes in values.

These changes may not seem dramatic when one considers the varied exposures and opportunities for exploration during the college as well as their potential for inner turmoil and investigation. A still more static picture seems to emerge from a comparison of what freshmen and seniors say about the importance to them of various interests and activities. The similarities of the percentages are striking (Table 17).

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[86] SQ 59

> Career, family love and affection[87] and developing a personal identity are ranked highest by freshmen and seniors alike. Participation in activities directed toward civic, national or international improvement, religious activities, helping other people are ranked low by freshmen and seniors alike.

Thus no change is indicated towards an outlook that stresses other people beyond one's immediate surrounding and self-improvement. The greatest increase is in regard to the importance of intellectual and artistic activities. Still only a quarter of the men and a third of the women rank intellectual activities high, after four years of exposure to academic life.[88]

But the picture of staticness conveyed by Table 17 has to be qualified by other considerations. In examining those items in our personality scales that show a great amount of change (20% or more), we find a trend towards greater acceptance of impulse, a relaxation of rigid or punitive controls, greater assertion of independence, less of a tendency to self-blame and greater readiness to look for objective conditions, rather than magic or moralizing, in accounting for misfunctioning, failure, and destructiveness (Table 18 lists some representative items that indicate this trend).

The trends just noted suggest that even though for many students certain values remain quite stable, there may be quite a difference in the ways in which these are held. Students may maintain the same general orientation and yet be much more flexible and tolerant in the way in which they express it. Hence when differing studies have come to differing conclusions concerning the degree of change

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[87] The great stress that students put on emotional well-being and security emerges also from their responses to SQ 71. In a list of 11 possible needs they rank, alike as freshmen and seniors, as the first four a set of strongly similar items, as if to quadruple the emphasis. The four are in order: (1) love and affection, (2) emotional well-being, (3) maintaining self-respect, (4) being accepted and liked by others. The great stress that students put on love and affection may spring from a sense that their cultivation is not given sufficient support in their education. They are more often encouraged to be solitarily performing animals than social or communicating animals.

[88] An outlook towards doing things is also indicated by the fact that when asked whom they admire, the seniors select political figures in larger proportions than artists, writers, philosophers and scientists combined (SQ 73). Thirty per cent of the Stanford men and 28% of the Berkeley men choose political figures. Sixteen per cent of the Stanford men and 18% of the Berkeley men choose artists, writers, philosophers and scientists combined.

Table 17

Percentages of Students who Rank the Following Interests and Activities Among the First Three

	1962 Freshmen		1965 Seniors	
	Men (N=375)	Women (N=225)	Men (N=271)	Women (N=212)
Career or occupations	56	26	58	24
Relations and activities with future family	56	63	49	57
Love and affection	39	54	42	74
Developing a personal identity	39	47	29	43
Time for thinking and reflection	24	35	22	23
Participation in activities directed toward national or international betterment	15	6	13	5
Helping other people	14	14	18	13
Religious beliefs and activities	13	12	7	7
Sexual needs	11	7	7	10
Participation as a citizen in the affairs of your comminity	7	2	6	3
Social life and entertainment	7	1	6	2
Sports or athletics	5	3	3	1
Home improvement (e.g., gardening, carpentry, decorating)	1	0	1	2

during college, this may in part be due to their tapping different aspects of values and the ways in which they are held and expressed. At the same time, we must always keep in mind that the desire for and the rate of change varies considerably with different students. (For instance, a look at Table 18 shows that sizeable portions of students did not participate in the described tendencies.)

One of the vexing problems in trying to ascertain a person's values is that conflicting and even contradicting values can be held by the same individual on different levels of the personality. Thus in their evaluation of themselves our students described themselves as satisfied with themselves[89] and a little later described themselves as depressed quite frequently[90] - a sign of a lower self-estimate.

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[89] SQ 63

[90] SQ 69. Between 57% and 71% say that they are depressed from a few times a month to daily.

Table 18

Percentages of Students who Agree with the Following Statements
(1961 and 1965 respondents are the same people)

	Stanford				Berkeley			
	Men (N=185)		Women (N=148)		Men (N=286)		Women (N=265)	
	1961	1965	1961	1965	1961	1965	1961	1965
In the final analysis, parents generally turn out to be right about things.	83	59	77	53	79	53	77	49
No weakness or difficulty can hold us back if we have enough will power.	64	36	68	45	68	47	73	46
Human passions cause most of the evil in the world.	63	43	65	28	63	46	63	32
I have been quite independent and free from family rule.	52	70	50	61	43	69	41	60
No man of character would ask his fiancee to have sexual intercourse with him before marriage.	52	11	52	11	47	13	54	21
I dislike women who disregard the usual social or moral conventions.	51	22	59	20	46	24	55	26
What youth needs most is strict discipline, rugged determination and the will to work and fight for family and country.	50	28	53	24	53	22	55	22
A person who lets himself get tricked has no one but himself to blame.	46	24	38	22	50	28	47	22
The surest way to a peaceful world is to improve people's morals.	45	25	43	17	37	25	40	12

(Table 18 continued)

	Stanford				Berkeley			
	Men		Women		Men		Women	
	1961	1965	1961	1965	1961	1965	1961	1965
Most of our social problems could be solved if we could somehow get rid of the immoral, crooked and feeble-minded people.	35	15	20	9	30	9	22	6
We should respect the work of our forefathers and not think that we know better than they did.	32	14	28	17	40	19	44	18
Most people don't realize how much our lives are controlled by plots hatched in secret places.	29	9	16	5	38	16	27	10

Similarly, students expressed themselves as satisfied with the progress they have made in social relations, while on deeper probing they revealed a sense of incomplete communication with and partial isolation from other people. Much of the thrust of our research has been to get at the less obvious levels of the person on which much of the fate of people, including their educability, is decided.

We conclude this section and the chapter by noting that students differ widely in what they consider man's happiest age (Table 19).

> About a fifth think the first three years of life are the happiest and this swells to between a fourth and a third for the first six years of life. But not more than 14% think that beyond 35 lies man's happiest time. The women put 13-16 at the bottom as far as happiness is concerned and the men put it near the bottom - confirmation in the students' own awareness of what psychologists have to say about the stressed of that part of adolescence.

A comparison between freshman and senior responses shows that students change their estimate of the happiness of people between 17 and 21 downward and that of age 22-35 upward. Only a brave 10% say in their senior year that life is happiest between 17 and 21, the phase of life just behind them.

Table 19

Percentages of Students who Rank the Following Ages as the Ones When Most People are Happiest

	Stanford			
	1961 Freshmen		1965 Seniors	
	Men (N=874)	Women (N=409)	Men (N=271)	Women (N=212)
Birth to 3	19	21	16	17
4 - 6	10	11	7	8
7 - 12	10	9	14	9
13 - 16	5	1	3	1
17 - 21	20	15	9	10
22 - 35	20	26	29	38
36 - 50	7	9	9	6
51 - 64	3	2	3	1
65 and older	4	2	1	2

Human consciousness seems to flicker between phantasies of a golden age in the past and of a rose-colored future. The present tends to get squeezed just as the ego is between the archaic id and the authoritarian superego. Trying to reduce this squeeze constitutes still another insufficiently met task of education.

Postscript: Excerpt from a Case Transcript

In the first interview of the senior year we asked our students to take a retrospective look and tell us how they had changed during their college years. Their responses, as coded by us, reveal again that their relations with other people are of paramount importance to them. They feel both that they have made progress in their relations with others and at the same time they still feel troubled by the fact that they have not come as close to other people as they would have wanted to.

The seniors also very strongly registered a sense of having become more independent during college. But they differ much in their description of the degree and manner of their independence. Some describe it in such relatively superficial terms as freedom to regulate their own hours or handle their own money, while others describe extensive changes in their views and values and greater independence from the expectations and pressures of their peers and the authorities.

The following excerpt is from the interview of a student with strong intellectual interests. It is to be kept in mind that the students interviewed by us made widely different responses to our questions of how they had changed. The following excerpt is, therefore, not to be taken as typical. It illustrates, nevertheless (1) the common concern of students to achieve greater closeness with others, (2) uncertainties and identity problems at the end of college, together with (3) the attainment of a fuller sense of the complexity of life and of a more tolerant superego.

Interviewer: How would you say you were different when you came to Stanford?

Student: Well, I was a lot different in my ideas. And I suppose this is kind of normal. A lot of ideas are different here. I just hadn't been thinking about a lot of things. Questioning a lot of the traditional things that you grow up with. I think I'm a lot more secure, about my ability to get along with people, especially. I hadn't been very happy when I went to high school and I came out here with kind of an aggressive get-to-know-people attitude and I had to have some way of proving to myself that I was accepted, a leader. And so I ran for office. And when I went to France [Stanford overseas campus]--well, not just that. I got along very well my first year here and made a lot of close friends and in France as well--I just became a lot more sure of myself, of my ideas of other people. I didn't have to--realized I didn't have to take a back seat to anyone.

Interviewer: Can you tell me a bit more about this situation in high school?

Student: I'm not sure. Maybe we haven't talked about it. I don't know. It probably would have come up at one time or another, briefly at least. I moved to Detroit in the tenth grade and went to live in a suburb called Mt. Peter. The school's about--my class had about 600 students. You know, real large school, about 1800 in three classes. And Mt. Peter is known around Detroit as being very snobbish. I guess it's upper income groups, upper-middle class. And you know, the high school is good academically, probably not as good as they think it is. But still a good one, and people have the attitude that you're lucky to be allowed to live in Mt. Peter. "We'll let you in and after while if you're good, you can be part of our group." But it never occurs to them that you might have something to offer them. This is pretty much the attitude. And my first year there I made some friends. Part of the problem was just geography, it's kind of a big place, about 40,000. People in just this one suburb right next to Detroit. And somehow the people that I liked best in schoollived clear on the other side of town, and I'm not sure what this was, I felt--this remained the case all during high school.

The place I lived--I think--I'm not a sociologist, or anything, but I think the part I lived was newer and more mobile in society. The part where my friends came from was very old and more settled; these people had lived there all their lives and so forth, were a lot more squared away than the people who lived where I lived. The people in my section were a lot wilder, partied more and so forth, seemed of less intelligence, were less interested in school and athletics and leadership and so forth. So it was kind of hard. I don't know--these people they grew up with and it was very hard for me to get into any kind of a group. I know I met this one girl, right away, because we both started going there at the same time and I--both of our families were building houses there, we both lived in the same apartment there in town. So we shared rides to school practically every day. Got to know her real well real fast. But I didn't have very many close friends at all.

By the second year, I had a couple [of friends] but they seemed very impermanent because next year they weren't in my classes and it kind of dissolved. And my junior year was the hardest. I really didn't have any friends at all. I mean, well, I was accepted in school, I was president of my home room and this kind of thing, but there was no way to develop anything outside of school. There was nobody in my neighborhood, there were very few people my age and the people that were there I didn't particularly like and they didn't like me. But the next year things were ok. I got to know this fellow Al I knew in my sophomore year a little bit--came pretty close. I got to know some of his friends better, whom I also knew slightly and things were a lot better, but it never was--I don't know--I was always kind of an outsider, specially in any kind of a group with Al in it. In this group that he had grown up with, I was always an outsider and I felt like it. This group had kind of broken up when I was home and he was there; there were some that had developed into kind of hard drinkers than the others and they were divided along this line I think. And I associated with more the non-drinkers, but. . I really don't like them. The only guy I really like is Al. They're not--maybe it was me--but most of those people, when they go to college they're never happy, always homesick and so on. Almost all of the people I knew there because it's Mt. Peter, they grew up thinking they live in heaven. And I was very happy when I got here, just getting away from there. That was one of the reasons I came to Stanford. I wanted to get as far away as possible. So consequently, when I got here, I did seem to get along very well quickly and this kind of redeemed my faith in myself. I didn't get to know any girls, and I had some misgivings about that. But when I was over in France I got to know girls--a lot of girls--and I felt pretty easy around both male and female.

Interviewer: Other differences?

Student: I really didn't have any idea when I came, about what I wanted to do for a living, I really didn't. I thought about being a lawyer, wasn't really sure. I remember writing--everybody had to write a vocational theme in twelfth grade English and I wrote on being a lawyer and after that I was pretty sure I didn't want to be a lawyer. Happens to everybody I guess, when they find out about what they do. I guess I haven't changed in that respect. I have become a lot more aware of the problems, perhaps a little more disillusioned--I guess you're going to jump on me for using that term--uh, perhaps got a little better idea of what life offers and what some of the problems are that are pretty insoluble in a way. Getting pretty deep here. A lot of it isn't really that important. I mean, you use the terms like--I've become a little more aware--at least that some people consider life to be completely absurd and Camus for example and I can see their point of view, a little bit. Makes me consider ideas that I never had considered before. You know, you just don't think about this, like whether there's any meaning or not. This just didn't come up in the high school mind, at least mine. As I said, things like religion and so forth, my ideas changed pretty drastically; but they were in the process of change before I came here. One of the big things was being in Europe; I think I was developing myself in so many ways, so fast there, that it hasn't been the same since. There were so many ways that I could learn new things, doing something new all the time, traveling around.

Interviewer: If you kind of sum up the difference that Europe made, what would you say?

Student: This is--I think--I want to beat around the bush for a second. Seems like almost everybody that goes over there--a lot of people, I think this is one of the ways that Stanford gets the highest per capita Peace Corps volunteers for example. People come back from there, they really don't know what they want to do. And I know so many cases...everybody's grades drop when they come back the next quarter. Everybody gets all screwed up, as the saying... some people do. I just feel it's a kind of dissatisfaction with the way it is in the United States. Kind of a different and so forth--hustle and bustle. Never take your time to realize what you're doing. Just to live for the present, you know. Experience things, realize that the end of life is the present. I get very dissatisfied with myself, like this past summer for example, even now, the fact that I spend all my time waiting for something else, and not to be alive right that moment. Except for a couple of those rare times that I've described. And that's the way I've felt this quarter, too. Made me mad. But a large part of it is that I'm just so busy that I can't...if I'm going to do the things that I've signed up to do, I just can't spend too much time, to enjoy a nice day like this one. If you go out and just maybe relax a little bit outside, go for a walk, instead of the books. I see it's clouding up. Uhm, but it's such an entangled thing I think it's just that if you didn't have to study you could work on it. Really a definite effect on people who go to Stanford overseas campuses. And maybe that's what it is. I don't know. We talked about it and so on and everybody agrees that it's there. I'm not really sure what happens. I'd like to know.

Interviewer: You mentioned talking about the effect and why it has the effect.

Student: Yeah, but I'm not sure really what it is. I think, it's maybe--you just realize. I remember one night, the same kind of night as the one I described and I went for a walk by myself in Rome. I'd kind of got dissatisfied with the people in the group, because we were all together, and I don't know, I just wanted to get off by myself. We were with the same people all the time we were there. I just kind of wanted to get off. Maybe some of us went out, but I ended up just walking around Rome by myself, didn't know where I was going. At night. And I remember stumbling up on the Forum, you know, and some of these things, and seeing all these ruins, seeing Mussolini and so forth. Such a historical perspective there, that you don't get here, and you realize kind of the impermanence of everything. And the relative nature of all these values that we place. So few people come back the same, but some people come back with...not wanting to be a business man or any of these mundane kind of things, kind of normal kind of thing to do in American society. Nobody wants to do that. I don't know what it is. It would be the last thing I would want to do, to go to business school next year. And I couldn't go to law school. But there's some sort of kind of perspective, I guess; it doesn't seem like much of a word, but I guess that's what it is. The junior year I guess has probably had the greatest effect on me. [A few sentences omitted] I was a lot more of a teetotaler when I came. I'm not sure how much this had to do with a loss of religious conviction, but probably some. And I'm more tolerant of individuals, my roommate, for example, who is probably my closest friend, gets quite drunk reasonably often. About every two weeks. I'm sure he's still asleep now because he was pretty late last night. And this is--certainly when I came, in my freshman year, I would have pretty well looked down on him. I don't do it myself, but I know the guy and I think--I wouldn't want to say that I don't blame him, but I can understand what he's doing and I'm sort of glad I don't enjoy it the way he does.

APPENDIX

The Senior Questionnaire

A 19-page questionnaire was administered to the seniors at Berkeley and Stanford early in 1965. The questions asked in this instrument were similar to those which we asked in our intensive interviews conducted during the four college years. The questionnaire was administered under the supervision of members of the research staff. As we could administer the questionnaire to a much larger number of students than we had interviewed, the results give a more general, though also more superficial picture of the reported behavior and attitudes of the two college classes we studied.

The following pages give the student responses in percentages. The responses for each of our four major groups (Berkeley men and women and Stanford men and women) are reported separately. Wherever, in the answer to a question, one of the four groups had a "no response" rate of 5% or more the "no response" percentages for all four groups are given. Because of "no responses," percentages do not always add up to 100%. At other times percentages add up to more than 100% because response percentages were rounded off to the nearest whole number.

The questions in this Appendix are not reproduced in the order in which they were asked, but are arranged topically by sections, and at the end of each section cross-references to other items are made. The following are the section headings.

Academic Life	Questions 1 - 9
Choice of Career	10 - 16
Extracurricular Activities	17 - 24
Relationships with Peers and Friendships	25 - 36
Sexual Development	37 - 44
Anticipation of Marriage and Spouse	45 - 49
Relationships with Parents	50 - 57
Perception of Self, Change and Development	58 - 74

The Senior Questionnaire was responded to by close to 60% of the students who were in residence on both campuses early in 1965 and who had responded to the Personality Inventory in the fall of 1961. (The Personality Inventory was re-administered simultaneously with the Senior Questionnaire.) Two probes were made to determine to what extent the approximately 60% respondents were like the rest of the students. The first analysis is reported in Chapter II and consisted in comparing the freshmen scores on eight personality scales of (1) those who responded to the personality inventory in 1961 and 1965 and (2) random samples of students who responded only in 1961. The 32 t-tests that were computed yielded only four significant differences, at the .05 level; and three of these were obtained for one of the four groups, the Berkeley women, and were, moreover, of small magnitude.

The other analysis was based on the fact that at both Stanford and Berkeley random samples of seniors were constituted and special efforts made to obtain a high rate of response. At Stanford 80% of the random sample responded and at Berkeley, 75%. The four random samples (Berkeley men-N=71, Berkeley women-N=79, Stanford men-N=60, Stanford women-N=40) were then compared with the other respondents on their Questionnaire reports of 21 activities engaged in during the college years. Forty-two chi-squares computed for Stanford men and women yielded statistically significant differences only two times out of 42, a difference that at the pre-assigned five percent level of confidence can be due to chance alone. For Berkeley statistically significant differences were obtained five times out of 42. These differences (2 for the men and 3 for the women) do not form any pattern to raise any serious questions for us about the representativeness of our Berkeley sample.

Finally, it may be of some help to our readers if we give some guidelines about the points at which differences between our four groups (Berkeley men and women, Stanford men and women) reach statistical significance. (The following is only a rough guide. The exact level of significance for the differences should be calculated by converting the percentages into numbers of respondents and then computing the chi-square statistics.)

When there are two choices, e.g., of YES or NO as in question 1a,[1] a difference of 10% between any two groups (e.g., Berkeley men vs. Stanford men) is significant at the .05 level. (For example, comparing Stanford men with Berkeley men in question 1a we have 71 - 55 = 16%, a significant difference.) A difference of 8% or 9% may sometimes also be significant.

Where there are three choices, as in question 2,[2] a significant difference between groups is revealed by adding up the percentage differences between the groups. If the sum of the differences is greater than 20, the difference between the groups is usually statistically significant. (For example, comparing Berkeley men with Berkeley women in question 17a, we have (67 - 52) + (40 - 31) + (8 - 2) = 30, a significant difference.) A difference of 18% or 19% may sometimes also be statistically significant.

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[1] Answers may also be combined to constitute only two alternatives as in question 5 where, for instance, "ranked first" is compared with "ranked second through sixth."

[2] Answers may also be combined to constitute only three choices. For instance, in question 3, "very sure" and "sure" may be combined and so may be "moderately unsure" and "very unsure." These two combination categories produce with "undecided" only three choices.

SENIOR QUESTIONNAIRE

	Stanford		Berkeley	
	Men	Women	Men	Women
	(N=272)	(N=212)	(N=262)	(N=239)
Academic Life				
1. When you entered the university as a freshman, did you have a fairly clear idea of what you wanted for an academic major?				
a. YES	55	55	71	62
b. If YES, what was your intended major at that time?				
Engineering	32	2	35	
Humanities	19	36	14	43
Natural Sciences	31	40	33	32
Social Sciences	17	21	11	22
Other	1	1	8	4
c. Major field at graduation of those who answered YES:				
Engineering	22	1		
Humanities	22	50		
Natural Sciences	21	13		
Social Sciences	27	13		
No response	9	22		
d. Major field at graduation of those who answered NO:				
Engineering	2	0		
Humanities	40	42		
Natural Sciences	14	16		
Social Sciences	31	26		
No response	12	16		
2. To what extent has your deciding on a major involved you in a struggle of conflicting thoughts and feelings?				
Very much	26	27	26	29
Moderately	40	39	39	35
Little	34	33	35	36
3. How sure are you that your present choice of major is the most appropriate for you?				
Very sure	32	36	27	30
Moderately sure	47	41	53	49
Undecided	10	10	6	10
Moderately unsure	7	8	8	7
Very unsure	4	5	6	3
4.a. Did you ever apply for an overseas campus?				
YES	52	70	1	7

	Stanford		Berkeley	
	Men	Women	Men	Women
4.b. Were you accepted?				
YES	38	59	0	7
c. Did you go?				
YES	31	53	0	6
5. In general, when you consider most of the courses you have taken, how would you rank all the following in their order of importance to you?				
a. Intellectual interest				
Ranked first	53	76	38	61
Ranked among first three	94	97	92	95
b. Useful for your career				
Ranked first	26	17	35	22
Ranked among first three	87	70	87	81
c. Getting good grades				
Ranked first	18	4	24	12
Ranked among first three	80	60	86	76
d. Getting to know the professor in class				
Ranked first	0	1	1	2
Ranked among first three	17	40	17	24
e. Getting to know the professor outside class				
Ranked first	1	0	0	0
Ranked among first three	12	20	13	12
f. Getting recognition from the professor				
Ranked first	1	1	2	0
Ranked among first three	10	11	11	11
6. I would say that the emphasis on grades in college				
a. No response	7	8	6	8
b. Has not made me happy, but was a help to stimulate me to greater achievement.				
Ranked first	32	25	26	23
Ranked among first three	74	64	72	67
c. Stimulated me to greater achievement.				
Ranked first	19	12	20	18
Ranked among first three	53	52	55	54
d. Has kept me from trying out courses and fields I might otherwise have tried.				
Ranked first	15	23	22	25
Ranked among first three	57	56	63	63

	Stanford		Berkeley	
	Men	Women	Men	Women
6. e. Has given me a bad time and had little influence on my achievement.				
Ranked first	14	8	15	10
Ranked among first three	34	28	35	31
f. Has lowered my self-confidence.				
Ranked first	11	17	11	10
Ranked among first three	40	53	34	39
g. Has had no particular effect on me one way or the other.				
Ranked first	10	17	10	14
Ranked among first three	38	39	38	40
7. As you look back and compare the senior year with your sophomore year, the academic pressures have become				
Easier to handle	66	53	49	64
Stayed about the same	23	33	35	24
More difficult to handle	10	12	14	11
8. As you look back on your 3½ years at the university:				
a. Can you think of any one time that was particularly difficult in terms of your academic work?				
No response or a response indicating a time period not included here.	10	10	8	8
Freshman year:				
Fall	22	17	19	20
Winter	9	10	5	7
Spring	7	7	14	15
Sophomore year:				
Fall	11	12	11	9
Winter	7	8	5	5
Spring	7	4	8	10
Junior year:				
Fall	8	8	11	7
Winter	7	10	2	3
Spring	5	6	9	6
Senior year:				
Fall	8	8	0	9
b. Can you think of any one time that was particularly good in terms of your academic work?				
No response or a response indicating a time period not included here	9	12	9	8

	Stanford		Berkeley	
	Men	Women	Men	Women
8.b. (continued)				
Freshman year:				
Fall	2	2	9	5
Winter	4	5	2	1
Spring	5	8	9	4
Sophomore year:				
Fall	7	11	4	6
Winter	6	6	2	4
Spring	11	8	15	15
Junior year:				
Fall	11	6	10	11
Winter	9	5	4	4
Spring	11	17	15	19
Senior year:				
Fall	25	20	22	24
9. a. How satisfied have you been with the relations of the University administration to the students?				
Very satisfied	8	7	3	3
Moderately satisfied	26	27	17	18
Neutral	21	19	18	19
Moderately dissatisfied	30	35	33	35
Very dissatisfied	13	10	26	22
b. Name two or three things in the administration you would like to see improved.*				
None or no response	27	26	18	11
Greater cooperation between staff and students	31	43	63	81
Changes in administrative personnel and/or attitudes	24	28	19	21
Changes in existing regulations	19	22	13	13
Academic improvement (incl. changes in grading system)	14	9	14	10
Stricter control of students	1	0	5	4
Other	28	24	20	14

Note also related items under other headings: 13a, 17a, 17h, 59a, 59b, 60b, 60h, 60m, 61e, 61h, 61j, 61l, 62c, 64b, 64e, 64g, 64h, 66i, 71, 74.

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* Up to three responses were coded. With the exception of the "Other" category, the percentages given here indicate the percentages of persons who made that response. As students often gave two or three responses, the percentages add up to more than 100%. The percentages given for "Other" are the percentages of the total number of responses made which were coded in that category.

	Stanford		Berkeley	
	Men	Women	Men	Women
Choice of Career				
10. When you entered the university, did you have a fairly clear idea of what career or occupation you wanted for yourself?				
a. YES	47	37	58	51
b. If YES, what career or occupation?				
Businessman	4	0	1	0
Engineer	8	0	17	0
Housewife and/or family	0	0	0	0
Lawyer	8	0	7	1
Medical Doctor	8	4	8	5
Natural Scientist	3	6	8	4
Teacher	6	17	3	27
Other Professional Occupations	5	8	9	11
Other	5	8	9	2
No response	54	64	44	51
11. To what extent has your planning for your life's work involved you in a struggle of conflicting thoughts and feelings?				
Very much	35	37	34	33
Moderately	42	44	39	37
Little	23	18	27	29
12. How sure are you that your present choice of career or occupation is most appropriate for you?				
Very sure	26	23	18	24
Moderately sure	49	48	53	48
Undecided	18	17	17	17
Moderately unsure	4	6	6	6
Very unsure	3	6	4	5
13. Do you plan to go to a graduate or a professional school within the next few years?				
a. If so, in what field?				
Business	13	0	7	0
Education	5	22	2	32
Engineering	8	1	9	0
Humanities	15	22	9	10
Law	17	1	12	0
Medicine	9	4	6	1
Natural Sciences	7	5	13	4
Social Sciences	10	17	11	15
Other	6	6	9	12
No response	10	22	21	25

	Stanford		Berkeley	
	Men	Women	Men	Women
13. b. What school is your first choice?				
Stanford	23	15	2	0
Univ. of Calif., Berkeley	9	11	35	37
Univ. of Calif., Other	5	2	3	4
Columbia	5	6	1	1
Harvard	13	5	2	1
Other	26	26	24	18
Undecided or no response	19	34	32	39
14. If you do not plan to go to graduate or professional school, what are your plans?				
Job (specified)	3	10	8	13
Job (undefined)	4	21	5	11
Marriage	0	5	0	7
Military	6	0	7	0
Other	1	2	4	5
Undecided or no response	86	61	76	64
15. Do you plan to enter the Peace Corps?				
a. YES	7	5	6	8
b. NO	72	72	67	64
c. Not sure	21	23	27	28
16. What occupation or activity do you think you are likely to be engaged in?				
a. ten years from now				
Businessman (executive)	6	0	3	0
Businessman (general)	12	0	6	0
Engineer	6	0	15	0
Housewife and/or family	0	54	0	49
Lawyer	11	0	10	0
Medical Doctor	9	4	7	1
Natural Scientist	5	2	7	1
Teaching (college level)	8	4	5	3
Teaching (elementary or secondary level)	16	14	11	24
Other Professional	18	13	22	14
Other	3	2	5	1
No response	6	6	8	7
b. twenty years from now				
Businessman (executive)	10	0	8	0
Businessman (general)	11	1	5	0
Engineer	4	0	11	0
Housewife and/or family	0	46	0	34

	Stanford		Berkeley	
	Men	Women	Men	Women
16. b. (cont.)				
Lawyer	9	0	8	0
Medical Doctor	9	4	6	1
Natural Scientist	4	2	6	1
Teaching (college level)	8	4	7	3
Teaching (elementary or secondary level)	15	16	10	29
Other Professional	16	12	19	18
Other	3	2	6	1

Note also related items under other headings: 64e, 71, 74.

Extracurricular Activities

17. Which of the following experiences or activities have you engaged in during your college years?

	Stanford		Berkeley	
	Men	Women	Men	Women
a. Reading (non-fiction)				
Frequently	55	61	52	67
Occasionally	38	34	40	31
Never or almost never	7	4	8	2
b. Reading (fiction)				
Frequently	36	61	32	48
Occasionally	54	37	55	47
Never or almost never	10	1	13	4
c. Social activities, parties, etc.				
Frequently	48	51	35	41
Occasionally	41	44	51	51
Never or almost never	12	4	14	7
d. Reading (escape)				
Frequently	14	17	15	18
Occasionally	46	51	44	48
Never or almost never	40	31	39	32
e. Movies				
Frequently	27	23	30	31
Occasionally	63	71	63	64
Never or almost never	10	6	7	4
f. Lectures				
Frequently	20	26	18	31
Occasionally	61	67	52	47
Never or almost never	19	6	30	22

		Stanford		Berkeley	
		Men	Women	Men	Women
17. g.	Museum, symphony, drama				
	Frequently	12	25	8	19
	Occasionally	54	62	46	62
	Never or almost never	35	13	47	18
h.	Civil rights activities in or near school				
	Frequently	4	7	4	5
	Occasionally	16	20	14	19
	Never or almost never	81	73	82	75
i.	Civil rights activities in other states				
	Frequently	1	1	0	1
	Occasionally	4	3	1	1
	Never or almost never	95	94	99	97
j.	National or community political activities				
	Frequently	4	4	4	2
	Occasionally	26	34	22	27
	Never or almost never	70	62	74	70
k.	Campus political activities				
	Frequently	8	8	7	4
	Occasionally	23	26	21	24
	Never or almost never	69	66	73	71
l.	Rock-climbing, scuba-diving, flying, etc.				
	Frequently	8	5	9	2
	Occasionally	26	10	28	22
	Never or almost never	66	84	63	75
m.	Breaking rules for the fun of it				
	Frequently	2	0	2	1
	Occasionally	20	22	18	10
	Never or almost never	78	78	80	88
n.	Seeking out off-beat places and people				
	Frequently	6	11	6	12
	Occasionally	44	47	40	45
	Never or almost never	51	41	54	43
o.	Service activities off-campus, e.g., work with the unemployed, minorities, etc.				
	Frequently	8	9	3	10
	Occasionally	17	31	12	33
	Never or almost never	75	59	84	57
p.	Sports activities as a spectator				
	Frequently	49	38	44	35
	Occasionally	41	42	42	41
	Never or almost never	10	20	15	24

	Stanford		Berkeley	
	Men	Women	Men	Women
17. q. Sports activities as a participant				
Frequently	39	24	29	16
Occasionally	35	35	35	34
Never or almost never	25	41	36	49
r. Student committees, etc.				
Frequently	15	22	7	14
Occasionally	38	42	23	29
Never or almost never	47	34	70	57
s. Church attendance and/or church-connected activities				
Frequently	17	18	18	25
Occasionally	22	27	19	27
Never or almost never	62	54	63	48
t. Creative expression: writing, painting, etc.				
Frequently	14	27	10	20
Occasionally	32	38	31	43
Never or almost never	54	35	59	37
u. Travel				
Frequently	37	41	21	21
Occasionally	47	49	56	58
Never or almost never	16	8	23	20
v. Other activities				
Frequently	23	25	20	24
Occasionally	6	6	10	4
Never or almost never	1	1	3	3
18. List the three organizations or groups that have been most important to you during your college years.*				
Athletics	19	8	13	6
Fraternity, sorority or eating club	62	0	25	24
Living group	14	33	18	22
Professional or honorary group	7	6	26	55
Student government and its committees	17	18	10	11
No response	10	18	23	20

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* The percentages given exceed one hundred percent for each group because the three responses were combined.

	Stanford		Berkeley	
	Men	Women	Men	Women
18. (cont.)				
Campus publications	8	7	2	4
Dramatics and affiliated activities	4	7	1	1
International relations and foreign student groups	14	18	2	7
Overseas campus	14	20	2	7
Political group or political problems study group	3	3	7	5
Religious group	10	8	15	22
ROTC and its auxiliaries	8	0	4	1
Service organizations	6	9	3	8
Social action groups (other than civil rights)	1	1	9	10
Other	13	26	20	21
19. Did you work during the summer after your				
Freshman year?				
a. YES	83	71	78	65
b. If so, what did you do?				
Food services[1]	2	9	3	7
General labor	31	3	23	2
Office work	11	26	8	21
Other services[2]	10	16	9	15
Sales	3	6	6	9
Semi-professional apprenticeships[3]	15	7	15	3
Other	10	3	13	8
Sophomore year?				
a. YES	71	58	82	64
b. If so, what did you do?				
Food services	2	6	3	6
General labor	21	1	24	2
Office work	6	21	8	23
Other services	8	10	11	13
Sales	4	5	5	8
Semi-professional apprenticeships	16	8	20	6
Other	13	7	11	5

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[1] e.g., waitress, busboy, etc. [2] e.g., lifeguard, camp counselor. [3] e.g., research assistance, nursing aid.

	Stanford		Berkeley	
	Men	Women	Men	Women
19. (cont.)				
Junior year?				
a. YES	79	67	79	59
b. If so, what did you do?				
Food services	2	7	2	3
General labor	19	1	14	2
Office work	6	22	7	22
Other services	6	8	9	9
Sales	5	5	7	8
Semi-professional apprenticeships	20	11	26	7
Other	20	12	14	8
20. How often do you drink the following alcoholic beverages?				
a. Beer				
Almost daily	11	2	2	1
1 or 2 times a week	39	28	30	16
1 or 2 times a month	28	39	36	34
1 or 2 times a year	10	20	16	25
Never	10	8	13	20
b. Wine				
Almost daily	1	0	3	1
1 or 2 times a week	10	10	8	11
1 or 2 times a month	45	61	35	43
1 or 2 times a year	30	23	34	29
Never	12	4	18	14
c. Hard liquor				
Almost daily	0	1	2	0
1 or 2 times a week	25	18	14	13
1 or 2 times a month	44	54	45	46
1 or 2 times a year	13	19	23	27
Never	14	6	14	11
d. Combination of the above				
Almost daily	6	1	4	1
1 or 2 times a week	30	25	17	15
1 or 2 times a month	18	39	25	31
1 or 2 times a year	11	9	15	19
Never	21	15	25	20
No response	13	11	14	13
21. How important are the following reasons for your use of alcoholic beverages (if you never drink, skip this item):				
No response	9	6	12	10

			Stanford		Berkeley	
			Men	Women	Men	Women
21.	a.	Makes me feel more confident				
		Very important	1	1	2	1
		Fairly important	17	13	13	9
		Not important	73	80	74	80
	b.	Like to get high				
		Very important	10	6	11	6
		Fairly important	43	31	41	27
		Not important	37	57	36	57
	c.	On dates especially				
		Very important	6	9	5	4
		Fairly important	37	41	24	30
		Not important	48	42	59	56
	d.	Only drink if group does				
		Very important	10	8	8	6
		Fairly important	28	37	34	36
		Not important	52	49	47	48
	e.	Relaxes me				
		Very important	22	16	16	12
		Fairly important	48	56	46	47
		Not important	22	23	26	30
	f.	Special occasions, e.g., holidays or special dates.				
		Very important	24	26	20	35
		Fairly important	48	57	45	43
		Not important	20	12	23	12
	g.	Helps me get over bad moods, depression				
		Very important	3	2	3	3
		Fairly important	18	16	17	14
		Not important	70	77	68	73
	h.	Helps me get over feeling bored				
		Very important	4	2	3	2
		Fairly important	17	11	15	12
		Not important	70	80	71	77
	i.	I drink, but my family would disapprove				
		Very important	4	1	2	1
		Fairly important	7	4	9	4
		Not important	80	89	76	82
	j.	I drink, but worry about it				
		Very important	1	0	1	1
		Fairly important	4	1	3	1
		Not important	86	93	83	85

	Stanford		Berkeley	
	Men	Women	Men	Women
21. k. Other				
Very important	13	15	11	13
Fairly important	6	5	6	3
Not important	1	2	2	1
22. In the last year, I have been drunk				
a. Never	32	53	40	57
b. Once	13	21	16	24
c. Under ten times	40	23	36	16
d. More than ten times	13	3	7	2
23. If you never or rarely drink or have quit drinking, which of the following reasons apply to your refraining? (Check all that apply.)				
Against religion	6	4	3	6
Bad for health	8	6	15	14
Makes me feel ill	8	8	9	14
Family would disapprove	7	4	7	6
Too expensive	30	11	23	25
Waste of time	27	14	25	22
Afraid of losing control	8	8	10	10
Just never started	14	13	16	22
24. Do you know personally anyone with a serious drinking problem?				
No response	4	3	3	6
a. YES	54	54	39	45
b. If YES, check all that apply				
Father	4	7	5	7
Mother	3	2	1	5
Brother or sister	0	1	1	1
Other relative	11	14	11	6
Friend	41	39	23	24
Other	3	3	2	4

Note also related items under other headings: 60d, 60i, 60j, 60k, 60 l, 61m, 61o, 64d, 64i, 66b, 66f, 66g, 66h, 71, 74.

Relationships with Peers and Friendships

25. Where did you live during your college years?				
Freshman year				
Dormitory	99	99	20	30
Fraternity or sorority	0	0	13	14
Overseas campus	0	0	0	0

	Stanford		Berkeley	
	Men	Women	Men	Women
25. (cont.)				
At home	1	1	19	21
Boarding house	0	0	19	13
Cooperative	0	0	10	9
Off-campus apartment, private house or home	0	0	15	12
Off-campus, other or unspecified	0	0	3	1
Other off-campus or off-campus unspecified	0	0	2	0
Sophomore year				
Dormitory	37	70	26	33
Fraternity or sorority	32	0	30	18
Overseas campus	18	28	0	0
At home	1	0	17	18
Boarding house	1	0	5	5
Cooperative	0	0	5	11
Off-campus apartment, private home or house	10	1	22	14
Off-campus, other or unspecified	0	0	2	0
Other off-campus, or off-campus unspecified	0	0	4	1
Junior year				
Dormitory	29	79	18	22
Fraternity or sorority	33	0	17	15
Overseas campus	5	15	0	4
At home	3	1	13	15
Boarding house	0	0	4	2
Cooperative	0	0	3	4
Off-campus apartment, private home or house	24	3	37	38
Off-campus, other or unspecified	5	0	3	0
Other off-campus or off-campus unspecified	2	3	4	0
Senior year				
Dormitory	24	86	11	9
Fraternity or sorority	27	0	13	15
Overseas campus	1	0	0	0
At home	3	1	10	13
Boarding house	1	0	3	1
Cooperative	0	0	2	2
Off-campus apartment, private home or house	32	4	55	60

	Stanford		Berkeley	
	Men	Women	Men	Women
25. (cont.)				
Off-campus, other or unspecified	6	0	3	0
Other off-campus, or off-campus unspecified	6	8	4	1
26. To what extent during your college years have you had close friends?				
a. On whom you had a significant influence				
Many	11	12	10	14
A few	79	76	73	78
One	4	7	10	4
None	6	4	6	4
b. Who had a significant influence on you				
Many	13	16	11	13
A few	80	77	76	81
One	4	5	8	4
None	4	1	4	2
27. During your college years, has it become more difficult for you to feel close to people?				
Very much more difficult	4	4	6	4
Slightly more difficult	10	14	15	15
About the same	41	32	37	31
Much less difficult	43	50	40	49
28. In college, have you formed a deep, meaningful and lasting relationship with one or several friends?				
a. Of your own sex				
YES	78	87	65	82
Not sure	17	11	24	15
NO	5	1	10	3
b. Friends of the opposite sex				
YES	62	77	49	77
Not sure	19	18	30	15
NO	18	5	20	8
29. How many of your friendships during the college years have broken up or were severely strained due to disagreement or conflict?				
None	53	36	51	44
One	22	28	25	26
Two	14	20	16	17
Three	5	9	4	8
Four or more	5	5	3	4

	Stanford		Berkeley	
	Men	Women	Men	Women
30. How much enjoyment do you find in being alone?				
Very much	23	37	14	23
Moderately	63	57	62	59
Very little	14	6	22	17
31. How many graduate students at this university have you come to know well?				
None	8	14	18	16
1-4	28	31	34	38
5-9	31	22	22	26
10-14	18	20	15	11
15-19	3	3	4	5
20-24	6	5	4	5
25-29	4	1	1	1
30-34	1	3	2	0
35 and more	0	1	0	0
32. With how many of your pre-college friends do you maintain a close relationship?				
a. Number of men friends				
None or no response	24	44	28	58
One	16	22	22	16
Two	18	17	17	16
Three	15	8	12	5
Four	7	3	10	3
Five	11	4	7	4
Six	5	1	1	1
Seven	1	0	2	1
Eight	1	1	1	0
Nine	1	0	0	0
b. Number of women friends				
None or no response	40	25	53	24
One	21	21	20	22
Two	17	23	13	23
Three	10	13	7	15
Four	3	7	2	5
Five	6	8	4	6
Six	1	2	0	2
Seven	1	1	0	0
Eight	1	1	1	1
Nine	0	0	0	1

	Stanford		Berkeley	
	Men	Women	Men	Women
33. In the last two years of high school, I dated				
Not at all	7	8	12	9
Once or twice a week	17	23	27	27
Every month	18	30	29	34
Every week	29	19	26	24
Every week or every month*	28	20	4	5
34. As you look back upon your three and a half years at the university, can you think of any one time that was particularly				
a. Difficult in terms of your social life?				
No response or a response indicating a time period not included here	19	12	23	11
Freshman year				
Fall	29	16	27	23
Winter	16	15	8	6
Spring	6	8	8	13
Sophomore year				
Fall	8	12	8	10
Winter	4	10	5	6
Spring	4	5	6	8
Junior year				
Fall	5	4	5	7
Winter	3	9	3	4
Spring	2	4	3	4
Senior year				
Fall	3	5	5	7
b. Good in terms of your social life?				
No response or a response indicating a time period not included here	15	14	19	8
Freshman year				
Fall	2	2	4	7
Winter	1	4	1	2
Spring	4	8	5	8
Sophomore year				
Fall	6	8	1	10

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* Because of a misprint in the questionnaire, not corrected on all copies, it could not be determined whether these responses fell into the "every month" or "every week" category. Hence these two are combined here. As can be seen, this affects the Stanford responses primarily.

	Stanford		Berkeley	
	Men	Women	Men	Women
34. (cont.)				
Sophomore year (cont.)				
Winter	6	5	3	3
Spring	9	8	9	10
Junior year				
Fall	6	8	8	13
Winter	5	8	4	4
Spring	16	17	13	12
Senior year				
Fall	31	19	33	23
35. Are you now or were you at any time during college				
a. Going steady?				
YES	52	65	52	66
b. Pinned?				
YES	19	18	11	23
c. Engaged?				
YES	16	23	14	28
d. Married?				
YES	8	8	8	13
36. How many evening dates in an average week did you have?*				
a. Freshman year				
None or no response	59	26	62	28
One	30	27	27	35
Two	7	24	9	22
Three	3	14	2	8
Four	1	5	1	4
Five	1	3	1	1
Six to ten	0	1	0	2
b. Sophomore year				
None or no response	38	29	46	25
One	35	23	36	29
Two	19	18	14	25
Three	5	13	4	11
Four	1	8	0	4
Five	0	5	1	1
Six to ten	1	4	0	3

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* Because of inaccuracies in the key-punching of Item 36, these figures are only approximations.

	Stanford		Berkeley	
	Men	Women	Men	Women
36. c. Junior year				
None or no response	31	23	42	24
One	34	18	28	28
Two	21	17	22	25
Three	5	20	5	13
Four	5	10	2	4
Five	1	5	1	2
Six to ten	3	7	1	5
d. Senior year				
None or no response	32	25	38	31
One	28	20	31	21
Two	18	20	18	25
Three	11	11	8	12
Four	3	9	2	5
Five	2	5	2	2
Six to ten	5	9	2	4

Note also related items under other headings: 17c, 57c, 57d, 59d, 60a, 61a, 61h, 61p, 61r, 62g, 66d, 67b, 71, 74.

Sexual Development

37. I first began taking a more intense interest in sexual matters				
Before I was 11	3	3	4	2
11-13	20	9	14	9
14-16	42	27	33	21
17-21	29	58	44	63
They have not yet assumed major significance	4	2	3	4
38. In comparison with your peers, do you think you have developed physically				
At an earlier age	22	24	16	23
At about the same age	56	60	56	60
At a later age	21	16	27	17
39. At what age did you mature physically?				
a. Men: At what age did you go through voice change, body hair growth, or other signs of the onset of puberty?				
No response	7		4	
Ten	1		1	
Eleven	7		3	
Twelve	18		18	
Thirteen	30		32	

	Stanford		Berkeley	
	Men	Women	Men	Women
39. (cont.)				
a. Men (cont.)				
Fourteen	20		25	
Fifteen	12		9	
Sixteen	4		6	
Seventeen	0		1	
Eighteen	1		0	
b. Women: At what age was your first menstruation?				
Nine or below		2		2
Ten		7		6
Eleven		18		15
Twelve		26		28
Thirteen		30		32
Fourteen		7		10
Fifteen		6		2
Sixteen		0		2
40. I believe that full sexual relations are permissible to the male before marriage.				
Agree strongly	36	22	35	31
Moderately agree	34	38	33	29
Neutral or undecided	7	9	11	10
Moderately disagree	11	19	11	12
Strongly disagree	12	10	9	16
41. During college, your degree of sexual intimacy has been a				
Low degree of physical intimacy	28	15	33	22
Moderate amount of physical intimacy	41	53	41	43
High degree of physical intimacy	30	30	24	33
42. During your college years, have your own attitudes towards sex involved you in a struggle of conflicting thoughts and feelings?				
Very much	18	35	19	32
Moderately	51	49	49	43
Very little	31	15	32	24
43. During college, how difficult has it been for you to control your sexual impulses?				
Very	11	9	10	8
Moderately	47	55	42	48
Little	41	34	45	42

44. During college, have you found that sexual impulses are increasingly more acceptable to you?

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
Very little	13	8	13	13
Moderately	62	54	61	46
Very much	24	36	23	38

Note also related items under other headings: 60m, 61i, 71, 74.

Anticipation of Marriage and Spouse

45. At what age do you expect to get married?

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
No response	17	14	22	12
Already married	8	8	8	13
Twenty-one	0	1	0	2
Twenty-two	6	12	7	17
Twenty-three	9	20	9	19
Twenty-four	10	17	7	14
Twenty-five	18	16	20	16
Twenty-six	10	6	6	4
Twenty-seven	6	2	7	1
Twenty-eight	7	1	7	2
Twenty-nine	0	0	1	0
Thirty	6	2	6	1
Thirty-one and above	2	0	1	0

46. How many children do you expect to have?

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
None or no response	7	11	17	10
One	1	1	3	1
Two	28	21	25	23
Three	40	38	39	36
Four	16	21	13	23
Five	6	6	2	4
Six or more	2	1	2	3

47. After marriage

a. Men: Is it acceptable to you if your wife works

b. Women: Do you plan to work

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
before you have children?				
Part time	21	15	25	13
Full time	75	78	70	81
Not at all	4	4	2	3
while the children are under six?				
Part time	18	21	18	17
Full time	4	4	3	3
Not at all	77	71	76	76

	Stanford		Berkeley	
	Men	Women	Men	Women
47. (cont.)				
while the children are between six and twelve?				
Part time	37	34	36	36
Full time	8	12	6	13
Not at all	54	49	55	47
after the children are older?				
Part time	44	43	42	42
Full time	39	43	37	46
Not at all	17	9	17	9
48. After I am married, when it comes to making decisions, if I had to choose one or the other, I would want to have my				
Own wishes to have priority over my spouse's	57	9	63	13
Spouse's wishes to have priority	35	83	31	82
No response	7	8	6	4
49. a. Men: I would want my wife to have self-control and not be dependent for control on me.				
Strongly agree	36		30	
Agree somewhat	45		43	
Neutral or undecided	8		13	
Disagree somewhat	9		11	
Disagree strongly	1		1	
b. Women: I would not want a husband who could not control me.				
Strongly agree		22		24
Agree somewhat		46		42
Neutral or undecided		12		9
Disagree somewhat		10		16
Disagree strongly		7		7
c. I feel that a husband should control his wife.				
Strongly agree	3	9	6	13
Agree moderately	46	46	40	42
Feel neutral	15	13	16	10
Disagree moderately	22	17	22	20
Disagree strongly	14	12	14	11

Note also related items under other headings: 35, 60f, 66c, 71, 74.

Relationship with Parents

	Stanford		Berkeley	
	Men	Women	Men	Women
50. Ages of parents				
a. Father's age				
40-44	7	7	7	7
45-49	19	24	21	25
50-54	36	36	32	28
55-59	23	18	23	16
60-64	7	5	8	8
65 and above	3	3	4	2
b. Mother's age				
39 and below	1	2	0	1
40-44	13	15	17	20
45-49	0	0	0	0
50-54	32	37	33	30
55-59	15	8	9	12
60-64	4	3	3	1
65 and above	0	0	0	1
51. Occupations of parents				
a. Father's occupation				
No response	7	4	8	11
Manager in a business	11	10	8	5
Business owner	9	7	9	9
Top executive of a business (e.g., president, vice-president)	10	9	2	5
Real estate or sales	7	5	8	5
Engineer	6	5	7	7
Medical doctor	5	6	5	5
Lawyer	5	6	1	1
University teacher	3	7	3	3
Semi-skilled or unskilled worker	3	1	6	7
Clerical or accounting (not C.P.A.)	3	1	5	2
Foreman or supervisor in industry	3	2	3	4
Teacher	3	2	4	4
Skilled tradesman	2	2	5	3
Professional other than those named above	11	16	8	16
Business occupations other than those named above	6	5	3	1
Other	6	12	15	11

			Stanford		Berkeley	
			Men	Women	Men	Women
51.	b.	Mother's occupation*				
		No response	4	3	5	4
		Housewife	56	62	48	52
		Volunteer work	25	35	15	20
		Clerical accounting	14	12	18	18
		Teaching	10	11	7	9
		Other professional	9	9	14	11
		Sales	4	2	5	3
		Low skilled	1	0	5	5
		Other	5	4	6	4
52.		Parents' marital status				
	a.	Father living				
		YES	94	92	93	86
	b.	Mother living				
		YES	97	98	97	96
	c.	Parents living together now				
		YES	85	87	83	77
	d.	Parents separated now				
		YES	8	4	7	7
	e.	Parents divorced now				
		YES	8	5	6	6
	f.	Father remarried				
		YES	9	7	11	6
	g.	Mother remarried				
		YES	4	7	8	8
53.	a.	How many siblings have you?				
		None	9	9	10	10
		One	33	35	36	30
		Two	34	31	29	24
		Three	15	15	13	19
		Four	5	7	6	6
		Five	0	2	3	3
		Six or more	0	0	2	2
	b.	How many brothers do you have?				
		None or no response	38	37	39	39

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* Two responses were coded for mothers in order to include any occupation in addition to the usual one of homemaking; thus, the combined percentages for any one group exceed 100%

	Stanford		Berkeley	
	Men	Women	Men	Women
53. b. (cont.)				
One	40	42	41	34
Two	16	15	14	21
Three	4	3	4	2
Four	1	3	2	2
Five	0	0	0	1
c. What are their ages?*				
One to ten	10	5	7	11
Eleven to fifteen	14	21	17	19
Sixteen to twenty	36	41	36	29
Twenty-one to thirty	22	20	26	29
Thirty-one and above	7	2	4	7
d. How many sisters do you have?				
None or no response	39	35	39	38
One	39	42	39	36
Two	17	17	16	18
Three	4	3	5	6
Four	0	1	1	0
Five	0	0	0	1
e. What are their ages?				
One to ten	9	5	9	9
Eleven to fifteen	18	20	18	22
Sixteen to twenty	34	39	35	37
Twenty-one to thirty	22	25	25	23
Thirty-one and above	4	3	5	5
54. During the years before I entered college				
a. My mother depended on her husband for her happiness.				
Not at all	6	8	10	11
Moderately	82	77	81	75
Was overdependent	8	12	8	9
b. My father depended on his wife for happiness.				
Not at all	7	8	10	6
Moderately	84	85	83	78
Was overdependent	5	2	6	8
No response	4	5	1	9
c. My parents differed in their views				
Often and strongly	7	12	6	11
Sometimes but strongly	14	15	21	22

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* The frequencies of response of each age for each sibling have been combined.

	Stanford		Berkeley	
	Men	Women	Men	Women
54. c. (cont.)				
Often but mildly	3	6	14	8
Sometimes and mildly	42	40	40	36
Rarely	16	15	16	17
Sometimes and strongly or often but mildly*	14	8	0	0
No response	4	5	2	6
55. a. As a child, before I was 13, I was punished				
Frequently	5	10	7	11
Occasionally	76	66	68	62
Almost never or never	19	24	23	27
b. As a child, before I was 13, I was usually punished				
Only by my father	19	11	20	9
Only by my mother	11	22	15	25
By both my parents	65	63	60	57
By neither parent	3	2	4	7
c. In your opinion, what was the most effective form of punishment used by your parent(s)?**				
No response	8	5	9	5
Verbal punishment	31	44	22	46
Corporal punishment	26	16	28	12
Denial or deprivation of a desired object or activity	21	14	21	17
Making me feel guilty or ashamed	9	9	11	11
Unspecified disapproval	6	9	4	6
Making me feel afraid	8	6	5	4
Physical isolation	4	7	3	5
Other	10	8	9	16
56. Which of your parents do you resemble more in your emotional make-up?				
No response	4	6	3	7
Father	56	46	54	44
Mother	40	48	42	49

57. How often during college have you found yourself either seri-

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* This category is for those Stanford responses which are ambiguous because of a misprint in the questionnaire form.

** See footnote to question 9b.

	Stanford		Berkeley	
	Men	Women	Men	Women
57. (cont.) ously disagreeing with or feeling strongly that your position was different from				
a. Your father?				
No response	2	4	3	7
Frequently	30	27	29	26
Occasionally	53	55	50	48
Almost never or never	15	14	18	19
b. Your mother?				
Frequently	30	25	28	27
Occasionally	55	61	52	54
Almost never or never	14	13	19	18
c. Friends of the same sex?				
Frequently	14	21	17	12
Occasionally	74	68	73	75
Almost never or never	12	10	9	12
d. Friends of the opposite sex?				
Frequently	13	18	13	10
Occasionally	75	74	71	77
Almost never or never	12	8	14	12
e. Adults in authority				
Frequently	16	18	17	16
Occasionally	74	76	69	67
Almost never or never	9	5	12	17

Note also related items under other headings: 61b, 61g.

Perception of Self, Change and Development

58. How have you changed since you entered college?*

	Stanford		Berkeley	
	Men	Women	Men	Women
No response	8	10	7	2
Little or no change	2	1	4	1
"Yes"	5	2	3	3
More self-confidence, poise and independence	26	41	29	35
More stable	23	25	11	14
Increased self-awareness, self-understanding	18	20	10	20
Increased intellectual curiosity and activity	13	16	13	12

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* See footnote to question 9b.

58. (cont.)

	Stanford		Berkeley	
	Men	Women	Men	Women
More awareness of others and better relationships	9	18	12	18
More liberal and tolerant	11	12	12	21
More relativistic, realistic or cynical	6	9	11	9
More outgoing and spontaneous	4	9	5	10
More awareness of the world	8	6	9	9
More liberal socially	5	9	4	10
Happier and more tranquil	4	6	2	4
More liberal politically	3	3	7	5
Broadened interests	4	6	2	4
More mature (unspecified)	7	6	9	7
More conservative	2	1	2	1
Less certainty, security, self-confidence or happiness	7	8	6	9
Other	19	10	23	27

59. How much do you feel you have changed since you entered college in regard to the following characteristics?

	Stanford		Berkeley	
	Men	Women	Men	Women
a. Efficiency as a student				
Little	14	17	16	19
Moderate	45	50	47	44
Much	41	32	36	35
b. Intellectual interest				
Little	8	3	4	7
Moderate	36	37	42	27
Much	56	60	53	64
c. Personal characteristics				
Little	15	9	15	13
Moderate	49	43	52	44
Much	36	48	32	42
d. Kinds of friends you have				
Little	32	32	34	30
Moderate	45	41	45	44
Much	23	27	20	25
e. Freedom to express your feelings and desires				
Little	19	14	15	11
Moderate	44	49	47	44
Much	36	37	38	44

	Stanford		Berkeley	
	Men	Women	Men	Women
59. f. Moral views				
Little	35	22	36	25
Moderate	44	50	42	49
Much	22	28	22	25
g. Religious views				
Little	42	40	54	46
Moderate	33	38	27	35
Much	24	22	18	18
h. Political views				
Little	29	35	26	27
Moderate	48	49	43	48
Much	23	16	31	24
i. Other				
No response	89	89	90	86
Little	0	1	1	1
Moderate	2	2	3	2
Much	9	8	6	12
60. What contributed to the changes you indicated in question 58?*				
No response	13	9	9	4
Personal relationships (of a non-romantic nature)	34	48	30	41
Course work and professors	20	27	21	23
Overseas experiences**	16	20	2	4
Independence and responsibility	9	16	12	19
Love, marriage or conjugal family	9	13	8	19
Diversity of student body	4	9	9	15
Challenge of academic life	10	10	8	7
Living group (except fraternity or sorority)	5	9	4	11
Student and political activities	5	5	10	11
Fraternity or sorority	9	0	6	6
Job	6	4	3	6
Academic failure	7	3	4	3
Dating	4	7	4	4

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* See footnote to question 9b.

** Responses at Stanford almost invariably referred to attendance at one of Stanford's overseas campuses. Only one-third of the students attended, so that the actual percentage of those attending who noted the experience as one which contributed to change is much greater than the percentages given here.

	Stanford		Berkeley	
	Men	Women	Men	Women
60. (cont.)				
Personal experiences (coded here if none of the more specific categories was appropriate)	15	11	16	16
Other	19	15	25	19
61. To what do you attribute the changes that have taken place in you during college?				
a. Living group, e.g., fraternity, dormitory.				
Little influence	26	27	42	33
Moderate	40	45	31	46
Much	34	28	26	18
b. Being away from home				
Little influence	19	14	24	14
Moderate	44	47	35	36
Much	36	40	38	48
c. Gaining understanding of myself as a person				
Little influence	6	5	9	7
Moderate	38	30	49	31
Much	55	66	42	63
d. Ideas in books I read on my own				
Little influence	32	25	37	33
Moderate	45	57	48	48
Much	23	18	15	18
e. Ideas presented in courses or by teachers				
Little influence	17	13	22	16
Moderate	56	53	56	56
Much	26	34	22	27
f. Work experience				
Little influence	31	40	36	37
Moderate	45	40	46	40
Much	23	19	18	23
g. Problems in my own family				
Little influence	64	51	62	53
Moderate	24	33	24	27
Much	12	14	13	19
h. Close relations with friends of the same sex				
Little influence	12	8	19	16
Moderate	52	42	55	45
Much	36	50	27	38

	Stanford		Berkeley	
	Men	Women	Men	Women
61. i. Close relations with friends of the opposite sex.				
Little influence	19	7	22	7
Moderate	40	27	45	36
Much	41	66	32	57
j. Close relations with teachers or other adults				
Little influence	49	35	59	42
Moderate	36	49	35	43
Much	15	16	6	14
k. Lack of academic success				
Little influence	60	63	63	71
Moderate	29	28	27	20
Much	10	8	9	6
l. Discovery of capacity I did not know I had				
Little influence	55	41	61	45
Moderate	34	42	30	41
Much	11	18	9	13
m. Participation in student organizations, committees, etc.				
Little influence	66	65	71	62
Moderate	22	26	20	27
Much	11	9	9	10
n. Participation in activities directed to social or political improvement.				
Little influence	72	70	73	67
Moderate	18	24	19	22
Much	10	7	7	10
o. Being overseas*				
Little influence	51	30	78	72
Moderate	9	14	3	4
Much	33	46	5	8
p. Crises in my relations with other people				
Little influence	36	22	46	29
Moderate	43	37	34	33
Much	21	42	18	36
q. Confrontation with problems and conflicts in myself				
Little influence	10	3	13	8
Moderate	41	30	49	35
Much	48	67	38	56
r. Confrontation with problems and conflicts with others				
Little influence	25	12	35	13
Moderate	53	49	47	54
Much	21	38	18	31

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* See footnote to question 60.

	Stanford		Berkeley	
	Men	Women	Men	Women
61. s. Other				
No response	90	94	92	88
Little influence	1	1	1	1
Moderate	1	1	1	2
Much	7	5	6	10
62. Are there changes you wished for that have not occurred?*				
No response	17	18	15	9
"No" (no further specification)	34	29	34	38
"Yes" (no further specification)	5	6	4	4
Increased academic ability or interests	13	12	11	13
Greater self-confidence or poise	7	10	7	11
Sense of purpose in life	7	8	4	4
Increased ability to form close relationships	4	5	4	3
Better relationships (e.g., less conflict, more popularity)	2	4	5	4
Other	26	33	29	29
63. Which of the following best describes how you feel/felt about yourself				
a. Now?				
I am largely dissatisfied with myself.	6	7	7	4
I am moderately dissatisfied with myself.	22	31	29	23
I am reasonably satisfied with myself.	58	50	55	59
I am quite satisfied with myself.	12	9	8	13
b. As a freshman?				
I was largely dissatisfied with myself.	13	16	11	15
I was moderately dissatisfied with myself.	19	27	18	23
I was reasonably satisfied with myself.	42	37	50	42
I was quite satisfied with myself.	22	15	19	18

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* See footnote to question 9b.

	Stanford		Berkeley	
	Men	Women	Men	Women
64. If you were a freshman again, what would you do differently?*				
No response	14	15	11	5
Little or nothing	19	14	17	21
Study harder or more efficiently	19	22	24	22
Change in personal attitude (other than the specific categories)	17	27	10	18
More involvement and/or variety in student or social activities	16	25	19	17
Not settle on major or career so quickly	7	10	14	15
Go to a different school	9	7	14	10
Take a greater variety of courses	7	8	3	6
Evaluate courses more carefully before taking them	5	6	5	8
Different living group	2	1	8	10
Other	16	14	16	15
65. During what age periods do you think people are happiest or most content? (See Table 19 of this chapter for freshman responses.)				
No response	11	10	10	7
a. Three years or less				
Ranked first	16	17	19	24
Ranked among first three	27	33	39	43
b. Four to six years				
Ranked first	7	8	10	8
Ranked among first three	35	35	39	47
c. Seven to twelve years				
Ranked first	14	9	13	9
Ranked among first three	38	34	41	34
d. Thirteen to sixteen years				
Ranked first	3	1	4	1
Ranked among first three	18	6	22	11
e. Seventeen to twenty-one years				
Ranked first	9	10	11	11
Ranked among first three	39	39	39	41
f. Twenty-two to twenty-five years				
Ranked first	29	38	28	33
Ranked among first three	60	66	52	59

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* See footnote to question 9b.

	Stanford		Berkeley	
	Men	Women	Men	Women
65. g. Thirty-six to fifty years				
Ranked first	9	6	7	9
Ranked among first three	39	40	34	32
h. Fifty-one to sixty-four years				
Ranked first	3	1	2	2
Ranked among first three	15	14	8	11
i. Sixty-five years or older				
Ranked first	1	2	0	0
Ranked among first three	3	7	3	6
66. What was the single most meaningful experience of your college experience?				
None or no response	12	12	13	9
Overseas experience*	24	33	3	7
Love, marriage or conjugal family	18	25	19	28
Friendship and personal relationships (other than those included above)	3	9	6	7
General college life (any aspects not covered by other categories)	5	2	8	6
Political or social reform movements (usually Free Speech Movement at Berkeley)	0	0	6	8
Living group	4	2	4	7
Job	7	2	4	7
Difficulty of college	4	1	6	2
Other	23	14	28	20
67. How did if affect your life?**				
No response	25	20	26	17
Greater personal insight	19	27	17	18
More insight into others or better relationships	13	19	15	16
Increased self-confidence or poise	7	13	11	17
More awareness of the world	10	11	5	5
Better sense of purpose in life	9	5	5	9
Affected choice of major or career	8	4	4	5

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* See footnote to question 60.

** Two responses were coded. The procedure followed was as noted in footnote to question 9b.

	Stanford		Berkeley	
	Men	Women	Men	Women
67. (cont.)				
Broadened interests	3	8	1	2
Happier and/or more content	2	7	4	6
Led to disenchantment, depression or disorientation	4	1	6	7
Other	33	28	36	33
68. During your college years, were there occasions when you were not sure what an action of yours would lead to, but you did it anyway?				
Frequently	12	12	6	9
Occasionally	69	73	67	70
Almost never	17	13	23	19
a. Did you usually act on the spur of the moment?				
No response	7	10	8	11
YES	26	25	23	27
b. After giving it considerable thought?				
No response	8	11	9	14
YES	63	60	66	57
c. Both a and b				
No response	10	11	16	13
YES	54	62	44	59
69. In the past few years, how often have you felt depressed?				
No response	0	0	2	2
Daily	4	3	2	1
A few times a week	13	15	11	13
A few times a month	42	53	44	48
A few times a year	35	26	30	32
Once a year	3	0	4	3
Almost never or never	4	1	7	2
70. During an average month in your senior year, how often have you felt physically out of sorts, e.g., colds, headaches, cramps, stomach trouble, fatigue, etc.?				
Never	23	8	20	9
Once or twice	61	56	63	60
Three to five times	11	25	10	18
Six to ten times	3	7	3	7
Almost daily	1	3	2	3

Note also related items under other headings: 74.

Values

71. Consider the following human needs. People think that some are more important than others. Rank them in order of importance as you think they have for most people.

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
a. Love and affection				
Ranked first	19	32	23	35
Ranked among first three	57	67	51	72
b. Emotional well-being				
Ranked first	17	27	24	27
Ranked among first three	47	59	51	63
c. Maintaining self-respect				
Ranked first	19	16	13	16
Ranked among first three	46	55	41	50
d. Being accepted and liked by others				
Ranked first	18	11	13	13
Ranked among first three	44	42	40	44
e. Achievement				
Ranked first	16	7	17	5
Ranked among first three	44	31	44	30
f. Curiosity and knowledge				
Ranked first	3	1	6	3
Ranked among first three	11	14	22	15
g. Sexual needs				
Ranked first	1	0	4	0
Ranked among first three	16	11	22	14
h. Wealth				
Ranked first	1	2	2	1
Ranked among first three	10	6	13	4
i. Play and recreation				
Ranked first	0	0	1	0
Ranked among first three	3	3	5	3
j. Fame and recognition				
Ranked first	0	0	1	1
Ranked among first three	6	4	7	3
k. Sensory and aesthetic pleasure				
Ranked first	0	1	0	0
Ranked among first three	3	3	6	3

72. a. How often do you pray?

	Stanford Men	Stanford Women	Berkeley Men	Berkeley Women
Frequently	11	19	12	26
Occasionally	23	26	21	25

	Stanford		Berkeley	
	Men	Women	Men	Women
72. a. (cont.)				
Almost never	26	25	22	21
Never	39	30	43	27
b. Why do you pray? (Check any that apply)				
Because it puts me in touch with a power greater than myself	29	34	25	37
To find out what God's will is	6	12	6	16
Because I feel anxious	28	37	22	36
Because it is part of the ritual of my religion	16	17	15	22
Other	12	19	13	16
73. Can you name a contemporary, historical or ficticious, person whom you particularly admire?				
No response	16	21	14	19
"No"	10	9	13	8
John F. Kennedy	12	14	14	17
Political figures	18	11	14	10
Artists and writers	11	4	9	10
Fictional characters	7	5	7	2
Humanitarian-spiritual	5	4	6	6
Philosophers	4	4	6	3
Professors at Stanford/ Berkeley	3	6	2	6
Women (any woman, except a relative or friend)	0	9	0	7
Others	15	13	15	12
74. Rank in order the following interests and activities according to the relative degree of importance you expect them to have in your life after graduation. (See Table 17 of this chapter for freshman (1962) responses.)				
a. Career or occupation				
Ranked first	26	7	32	11
Ranked among first three	58	24	65	38
b. Love and affection				
Ranked first	11	23	10	19
Ranked among first three	42	73	44	68
c. Relations and activities with future family				
Ranked first	18	28	18	34
Ranked among first three	49	58	45	59

	Stanford		Berkeley	
	Men	Women	Men	Women
74. d. Developing a personal identity				
Ranked first	16	26	19	21
Ranked among first three	29	43	34	35
e. Intellectual and artistic activities				
Ranked first	8	7	5	3
Ranked among first three	25	32	26	25
f. Time for thinking and reflection				
Ranked first	2	3	5	2
Ranked among first three	22	24	18	24
g. Helping other people				
Ranked first	4	2	5	5
Ranked among first threee	18	13	16	21
h. Sexual needs				
Ranked first	0	0	2	0
Ranked among first three	8	10	17	8
i. Participation in activities directed toward national or international betterment				
Ranked first	6	1	3	1
Ranked among first three	12	6	10	5
j. Religious beliefs and activities				
Ranked first	3	2	3	5
Ranked among first three	7	7	8	10
k. Social life and entertainment				
Ranked first	0	0	2	1
Ranked among first three	7	3	9	6
l. Participation as a citizen in the affairs of your community				
Ranked first	1	0	0	0
Ranked among first three	6	4	4	4
m. Sports				
Ranked first	0	0	0	0
Ranked among first three	3	1	4	1
n. Home improvement				
Ranked first	0	0	0	0
Ranked among first three	1	2	2	4

Note also related items under other headings: 5, 59f, 59g.

Chapter II

PERSONALITY SCALE CHANGES FROM THE FRESHMAN TO THE SENIOR YEAR

Harold A. Korn, Ph.D.

It is becoming increasingly popular among colleges and universities to administer a series of psychological inventories to entering freshmen. Often the same testing is repeated at later points in the student's college career. The rationale behind this practice is an interest in and concern about the impact of the college experience on the lives of students. The use of measures of personality characteristics for the evaluation of the college experience carries with it a theoretical point of view about higher education and a variety of methodological problems.

The theoretical point of view makes explicit the long acknowledged goals of the liberal arts curriculum to have an impact on both the quality of the students intellect and his values. Inherent in this theoretical position there is also a conception of the unifed nature of personality, values and intellectual functioning. A major shift in one of these spheres will have ramifications on the other two. Therefore, the study of the personality characteristics of students and the changes that occur during college becomes a means for evaluating the impact of college.

Although the importance of studying the interrelationship between the personality characteristics of individuals and the impact of the college experience seems to be gaining increased recognition, the methods for accomplishing this leave much to be desired. In the analysis of the results presented here we will attempt to further our understanding of this complex process and at the same time point out some of the difficulties that face the investigator.

Brief Description of the Scales

Six scales of the Omnibus Personality Inventory (OPI), plus the Authoritarianism (F) and Ethnocentrism (E) scales, were given to the entering freshmen classes at Stanford and the University of California at Berkeley in 1961. The following description of the six OPI scales are taken from the manual.[1]

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[1] Omnibus Personality Inventory Research Manual, Berkeley, California: Center for the study of Higher Education, University of California, 1962. The number of items in each scale is listed in parenthesis at the end of each verbal description. Raw scores from the freshmen testing were converted into standard scores.

Social Maturity (SM)[2] High scorers are not authoritarian, and they are flexible, tolerant, and realistic in their thinking. They are not dependent upon authority, rules, or rituals for managing social relationships. In general they are impunitive, although capable of expressing aggression directly when it is appropriate. High scorers are also frequently interested in intellectual and esthetic pursuits. (144 items)

Impulse Expression (IE) This scale assesses a general readiness to express impulses and to seek gratification either in conscious thought or in overt action. The high scorers value sensations, have an active imagination, and their thinking is often dominated by feelings and fantasies. (124 items)

Schizoid Functioning (SF)[3] The high scorers admit to attitudes and behaviors that characterize socially alienated persons. Along with feelings of isolation, loneliness, and rejection, they may intentionally avoid others and experience feelings of hostility and aggression. The ego weakness of high scorers may be characterized by identity confusion, day-dreaming, disorientation, feelings of impotence and fear of loss of control. (107 items)

Masculinity-Femininity (MF) This scale assesses differences in attitudes and interests between college men and women. High scorers (masculine) express interests in science and problem solving; they admit to few adjustment problems, feelings of anxiety, or personal inadequacies. They also tend to be somewhat less sociable and less esthetically oriented than low scorers. (103 items)

Estheticism (Es) The high scorers endorse statements indicating diverse interests in artistic matters and activities. The content of the statements in this scale extends beyond painting, sculpture, and music and includes interests in literature and dramatics. (51 items)

Developmental Status (DS) This scale differentiates between older and younger collefe students. High scorers are more like seniors in their attitudes and thinking. They express more rebelliousness toward authority, especially when it is institutionalized in family, school, church or state. They are less authoritarian than the low scorer and, at the same time, freer to express impulses. (72 items)

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[2] A briefer version of this scale has been named the Autonomy Scale.

[3] This scale has been re-christened Social Alienation Scale.

Ethnocentrism (E)[4] Ethnocentrism is based on a pervasive and rigid ingroup-outgroup distinction; it involves stereotypes negative imagery and hostile attitudes regarding outgroups, stereotyped positive imagery and submissive attitudes regarding ingroups, and a hierarchical authoritarian view of group interaction in which ingroups are rightly dominant, outgroups subordinate. (20 items)

Authoritarianism (F)[4] Authoritarianism is a more general form of ethnocentrism. Rather than being tied to specific minority groups, it is a general disposition to respond to the world with the stereotyped conception of the importance of all authority and people. Authoritarianism involves rigid ingroup-outgroup distinctions, stereotypical imagery, dogmatism, intolerance of ambiguity, and denial of certain needs, such as dependence, weakness, and often sexual urges. (32 items)

Representativeness of the Sample

When the class which entered in 1961 became seniors, they were once again invited to take the same battery of tests in about the middle of their senior year. Close to 60% of the eligible students at Berkeley and Stanford took the tests as seniors. As part of our attempt to determine whether or not this senior sample is representative of the entire class, a random sample was selected of all those students who had taken the tests as freshmen but did not take them again as seniors. Their freshmen scores could then be compared with the freshmen test scores of those students who took the tests twice. The results appear in Tables 1-4. There were 32 t-tests computed and four of these were significant at the five percent level of confidence. Three of these four significant differences occured for the Berkeley women but the magnitudes of these differences were not very large. It would seem reasonable to assume that the results we have for the group taking the tests both as freshmen and as seniors are representative of the larger class.[5]

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[4] Adorno, T.W., Frenkel-Brunswik, Else, Levinson, D.J. and Sanford, N. The Authoritarian Personality, New York: Harper, 1950.

[5] Another measure of the representativeness of our sample comes from the Senior Questionnaire described in Chapter I, which was taken by the same students for whom we have freshmen and senior personality test scores. There were negligible differences between a random sample of respondents and the rest of the students for a wide variety of questions. For a more detailed description see the Appendix to Chapter I.

Table 1

Stanford Men

Means, Standard Deviations and t tests for 8 personality scales between a Random Sample from the freshman class and other freshmen students who took the Inventory again as Seniors.

Random Sample (N=200)			Freshman Results of Senior Sample (N=185)		
$\bar{X}$	SD		$\bar{X}$	SD	t test
49	10.0	SM	50	10.0	NS
50	10.0	IE	47	10.3	2.13 .05
49	10.6	SF	48	10.4	NS
49	10.6	MF	50	10.2	NS
49	10.6	ES	50	10.3	NS
50	10.5	DS	49	10.9	NS
113	25.8	F*	110	24.2	NS
53	17.6	E*	51	18.2	NS

*Raw Scores

Table 2

Stanford Women

Random Sample (N=291)			Freshman Results of Senior Sample (N=148)		
$\bar{X}$	SD		$\bar{X}$	SD	t test
50	9.6	SM	50	10.8	NS
49	9.6	IE	50	10.6	NS
49	10.3	SF	50	10.0	NS
50	10.1	MF	50	10.7	NS
50	9.5	ES	49	10.9	NS

Table 2 (cont.)

Stanford Women

Random Sample (N=291)			Freshman Results of Senior Sample (N=148)		
$\bar{X}$	SD		$\bar{X}$	SD	t test
50	9.9	DS	50	10.5	NS
104	21.8	F*	103	21.8	NS
47	15.6	E*	45	14.5	NS

*Raw Scores

Table 3

Berkeley Men

Random Sample (N=243)			Freshmen Results of Senior Sample (N=286)		
$\bar{X}$	SD		$\bar{X}$	SD	t test
50	11.22	SM	50	10.17	NS
51	10.29	IE	50	10.35	NS
49	10.89	SF	50	10.15	NS
49	11.78	MF	49	10.70	NS
49	10.89	ES	50	9.82	NS
50	11.18	DS	50	9.98	NS
117	24.32	F*	115	25.78	NS
58	20.08	E*	56	20.43	NS

*Raw Scores

Table 4

Berkeley Women

Random Sample (N=219)			Freshman Results of Senior Sample (N=265)		
$\bar{X}$	SD		$\bar{X}$	SD	t test
50	9.57	SM	50	10.5	NS
51	9.79	IE	49	10.3	2.51 .05
51	10.58	SF	49	9.9	2.31 .05
49	10.81	MF	50	10.1	NS
50	9.57	ES	50	10.1	NS
51	10.17	DS	50	10.4	NS
115	26.35	F*	112	26.5	NS
54	20.30	E*	49	17.7	3.24 .01

*Raw Scores

A Perspective on Mean Score Changes

Although we intend to raise several questions about the appropriateness of using mean scores for the study of change during the college years, it is still of interest to point out some of the trends which are evident. There is a consistent pattern of change for both men and women at both Stanford and Berkeley. Between the beginning of the freshman year and the senior year these students in a wide variety of ways shift their attitudes, behaviors and feelings.

The eight scales we have used provide us with some clues as to the nature of these changes. The results for the Stanford and Berkeley men and women appear in Talbes 5-8. For all groups and for all scales the mean differences between the freshmen and senior year were statistically significant. Four of these scales have enough in common so that we can describe the changes as a composite. The SM, DS, F and E (Social Maturity, Developmental Status, Authoritarianism and Ethnicentrism) mean score changes all reflect a movement toward greater open-mindedness and tolerance; a rejection of a restricted view of life and a humanization of conscience. The complexity of the world is more and more recognized and there is less tendency for demanding pat answers. Along with this, the stereotyped view of right and wrong gives way to a broader acceptance of human diversity.

Table 5

Stanford Men
(N = 185)

Means, Standard Deviations, t tests, and Correlation Coefficients for eight personality scales administered in 1961 and 1965.

1961			1965			
X	SD		X	SD	t test	r
50	10.0	SM	58	11.0	11.87**	.6226
47	10.3	IE	51	10.0	5.89**	.5865
48	10.4	SF	45	10.0	4.54**	.6123
50	10.2	MF	47	12.4	4.01**	.6099
50	10.3	ES	52	11.0	3.05**	.6543
49	10.9	DS	59	10.7	13.05**	.5630
110	24.2	F***	94	25.8	9.58**	.5914
51	18.2	E***	44	17.0	4.79**	.3617

** Significant .01 level
*** Raw scores

Table 6

Stanford Women
(N = 148)

Means, Standard Deviations, t tests, and Correlation Coefficients for eight personality scales administered in 1961 and 1965.

1961			1965			
X	SD		X	SD	t test	r
50	10.8	SM	57	11.3	8.67**	.60
50	10.6	IE	54	11.3	5.25**	.64
50	10.0	SF	46	11.9	4.83**	.58
50	10.7	MF	48	11.7	2.24*	.53
49	10.9	ES	52	11.4	3.92**	.65
50	10.5	DS	61	11.9	12.84**	.57
103	21.8	F***	90	25.9	6.40**	.47
45	14.5	E***	42	16.8	2.13**	.40

* Significant .05 level
** Significant .01 level
*** Raw scores

Table 7

Berkeley Men
(N = 286)

Means, Standard Deviations, t tests, and Correlation Coefficients for eight personality scales administered in 1961 and 1965.

1961			1965			
X	SD		X	SD	t test	r
50	10.17	SM	57	11.15	11.62**	.5537

Table 7 (cont.)

X	SD		X	SD	t test	r
50	10.35	IE	52	11.46	3.59**	.6305
50	10.15	SF	47	11.26	4.84**	.5208
49	10.70	MF	47	12.55	2.73**	.4431
50	9.82	ES	52	11.58	3.76**	.6578
50	9.98	DS	58	11.17	14.11**	.5939
115	25.78	F***	96	26.15	12.26**	.4920
56	20.43	E***	44	17.54	10.18**	.4556

** Significant .01 level
*** Raw scores

Table 8

Berkeley Women
(N = 265)

Means, Standard Deviations, t tests, and Correlation Coefficients for eight personality scales administered in 1961 and 1965.

1961			1965			
X	SD		X	SD	t test	r
50	10.5	SM	58	10.0	15.87**	.68
49	10.3	IE	52	11.0	5.55**	.66
49	9.9	SF	46	10.5	5.28**	.59
50	10.1	MF	48	10.3	3.05**	.45
50	10.1	ES	53	10.4	6.25**	.71
50	10.4	DS	59	10.9	17.74**	.70
112	26.5	F***	89	26.3	15.68**	.59
49	17.7	E***	39	15.7	8.73**	.38

** Significant .01 level
*** Raw scores

In keeping with many of the changes we just described, the increase on the IE (Impulse Expression) scale portrays a further movement towards psychological acceptance of a broad range of human behaviors. In many ways it represents a greater willingness to experiment with aspects of life that have been formerly taboo.

Along with these changes in the direction of greater psychological freedom there is some evidence of a greater capacity for feeling close to others. The SF (Schizoid Functioning or Social Alienation) scale portarys a lessening of a feeling of isolation from and rejection by others.

The two other scales used in this study, MF (Masculinity/Femininity) and Es (Estheticism) reflect a general increase in the students' awareness and appreciation of a variety of artistic/esthetic experiences.

Central to any discussion of these findings is some clarification of two concepts which are often used when talking about change during the college years. The question is often posed: Is it personality development or is it socialization? There are a variety of theoretical and methodological problems involved in trying to differentiate between "personality development" and "socialization". Here we only wish to point out that socialization (learning what society expects and will tolerate) can modify a broad range of attitudes and behaviors of an individual without touching the basic character structure of an individual. For example, the provincial attitudes of a freshman may give way to an unltra-sophisticated manner as a senior, but the underlying disposition to fear that which is different may not have changed.

In contrast to the seemingly dramatic changes that result from socialization, the changes associated with personality development are often more subtle but they are more pervasive and less subject to future change. Consider the freshman who used his scientific or his musical talents as a way of screening out other forms of experience and other intellectual modes of responding to the world. Gradually this student might be encouraged to be responsive to a broader range of human experience; this would involve more depth and breadth in his response to interpersonal relationship and to the varied realms of intellectual experience. Central to this increasing openness would be a change in the individual's persception of himself. Important in this development of his self-concept would be a greater acceptance of the diversity of his own feelings and a confidence that he could satisfactorily handle the stress that might be associated with these new experiences.

We can achieve some perspective on our findings with respect to this question about socialization and personality development by viewing them in the context of the prevailing attitudes and mores of our society. We noted earlier the SM, DS, F and E mean score changes all reflect a movement toward greater open-mindedness and tolerance; a rejection of a restricted view of life and a humanization of conscience. Many of these changes can be interpreted as part of a socialization process because the movement is towards the prevailing operational moral standards of our society. What may be happening is with increasing awareness and increasing breadth of contact the adolescent finds that he does not have to be so puritanical. It appears that the liberalizing impact of higher education is greatest in those areas where there is already a great deal of approval in the general culture.

In contrast we can consider an area of human functioning, where there is a less clear mandate from the general culture. The college experience is intended to be particularly potent in contributing to the intellectual development of the individual. Increased appreciation for the complexity of most problems and a greater commitment to the use of reason for solving most problems are among the most frequently articulated goals of a college education. Included in this conception of intellectual development is the openness to respond to a broad range of human emotion in relationship to other individuals, works of art and the surrounding environment. The SM, DS, F and E scales all have some items which relate to intellectual development. However, as we will see later in this chapter, these items change less frequently than do items relating to "social attitudes and mores". Further evidence for the college having less impact on students' intellectual development than on their social attitudes can be found in the results for two other scales. For all four groups the MF scale goes up a few points; this is in contrast to the marked changes in the SM, DS, F and E scales. This suggests a slight broadening of the esthetic interests of these students. The cognitive processes which are involved in the capacity to respond to the esthetic domain require that the individual integrate his feelings with his ability to think. It is just this integration of feeling and thought which distinguishes intellectual development from socialization.

Initially, it may be somewhat baffling to suggest that the college experience contributes more to the socialization of the student than it does to his intellectual development. However, the conditions which favor the changes we have been describing as socialization are powerful and pervasive. In contrast, intellectual development has a variety of forces working against it.

(1) Intellectual development is rooted in the character structure

of the individual. By character structure we mean to suggest that complex set of attitudes, feelings and accumulated knowledge which determines how an individual sees the world. Therefore intellectual development could involve the student, at minimum, in an examination of how he has come to view the world in his own unique way. More often such an examination leads to the possibility of changing some significant segment of the individual's attitudes, feelings, or the organization of his knowledge. It is this possibility which makes intellectual development capable of being an anxiety-producing experience and thus an experience to be avoided.

(2) Complementing this reluctance on the part of the student to seek out intellectual development is the reluctance of most college faculties to teach in a manner which might relieve student anxiety about intellectual expansion. Mastery of content is often held sufficient without concern for enabling the student to relate the material to his own goals and personal frame of reference.

(3) In addition to these specific barriers to intellectual development, there is the general anti-intellectualism and unintellectualism that exists in the surrounding culture. This in turn becomes reflected in the students own peer culture.

So far we have looked at certain trends in society that are reflected in the college culture. But what happens when there are contradictions in society's attitudes toward certain kinds of human experience? The next two scales we will discuss involve some of these contradictions.

For all four groups there is only a slight decrease in the social alienation (SF scale) that is experienced by these students. As many of these individuals will never again have such a variety of opportunities to move toward greater human closeness and shared understanding, one may raise the question of why change has not been more pronounced. A partial answer can be stated as follows. While there is great emphasis in our culture on having an active social life there is also a variety of forces which make these encounters more directed towards appearance, or even a ritual than a human experience of rewarding intimacy. Students learn a great deal about how to be in association with others but there is little opportunity to learn about others in great depth. The socialization process we mentioned earlier permits students to learn a great many social skills but the personality development which is necessary for psychological intimacy is not equally encouraged.

Just as society seems to encourage sociability but not intimacy, society seems to encourage the isolated expression of feelings (anger at the umpire or the warm embrace when people meet after a period of separation) but not a continuing awareness of how one feels. While there are many sanctions against the open expression of feeling in most situations, human emotion is nevertheless present. Nearly all human behavior has an emotional or evaluative component, e.g., if asked most individuals can say they liked or disliked what they were doing at a given moment. However, because of long training in the denial of feelings individuals are often unaware of their presence or their manifestation. Students often feel bored, tired or restless and can not recognize that this is an expression of feelings, in disguised form, about something that is happening to them.

In addition to the social misgivings about the whole realm of human emotion, the academic establishment itself often sets intellect in opposition to emotion. Rather than emphasizing the interrelationship between reason and passion the student is often cautioned against too much involvement with his subject matter. Given the social forces working against the encouraging of the recognition of one's own feelings it may be surprising to find that all four student groups have an increase in their Impulse Expression scores. When we move on to an analysis of what the change actually represents, we will once again see that the change is, in fact, a move toward what is condoned in the society at large.

Variability and Mean Score Changes

Often analysis stops with an examination of the mean score changes. It is necessary to move to another level of analysis in order to arrive at a clearer picture of how much change is taking place and the nature of that change.

The dimensions tapped by the Social Maturity (SM) and the Impulse Expression (IE) scales are of particular relevance to the study of personality characteristics and the college experience. Intellectual development and personal growth depend upon the individual's capacity to be responsive to new experiences and the possibility of those new experiences becoming meaningfully integrated with his past experiences. The SM scale has as its focus the student's capacity to be open-minded and unconstrained by an excessive dependence on the power of arbitrary authority. While the IE scale has as its focus the individual's capacity to be in touch with his feelings and the individual's capacity for integrating his feelings with his intellectual processes.

The conceptual richness of these scales makes them important tools in the analysis of the varieties of student development. There are two main issues to be considered: (1) how many and which individuals change in a direction opposite to the overall mean change and the psychological significance of these changes and (2) the more fundamental question of what the scales in more detail represent.

We noted above that the direction of change was consistent with expectations based on the society's mores and standards, but we did not focus attention on how greatly the magnitudes of these mean differences vary. A statistically significant difference between means can occur for groups of this size, even though the absolute difference is only two standard score points. The magnitude of change is a clue as to how many individuals will have change scores consistent with the mean change; still even with large mean changes, certain trends may be masked.

Table 9

Stanford Males

Distribution of Change Scores for Individuals with Different Initial Scores

Initial Score Senior Score	High (≥60)	Middle (45 ≥< 55)	Low (≤40)
		SM	
Increase	24	63	36
Same	2	3	0
Decrease	11	7	4
		IE	
Increase	10	40	52
Same	1	0	0
Decrease	12	21	3

Stanford Women

Initial Score Senior Score			
		SM	
Increase	20	40	26
Same	3	4	0
Decrease	9	6	0

Table 9 (cont.)

Stanford Women

IE

Initial Score Senior Score	High (≧60)	Middle (45 ≧≦ 55)	Low (≦40)
Increase	9	39	23
Same	2	5	1
Decrease	17	11	3

Table 10

Berkeley Males

Distribution of Change Scores for Individuals with Different Initial Scores

SM

Initial Score Senior Score	High (≧60)	Middle (45 ≧≦ 55)	Low (≦40)
Increase	32	82	47
Same	3	5	0
Decrease	20	12	6

IE

Increase	22	72	36
Same	1	6	3
Decrease	27	36	12

Table 10 (cont.)

Berkeley Women

Initial Score Senior Score	High (≥60)	Middle (45≥≤55)	Low (≤40)
		SM	
Increase	40	79	52
Same	1	1	0
Decrease	11	8	0
		IE	
Increase	21	49	48
Same	2	9	3
Decrease	26	28	11

In Tables 9 and 10, data are presented which illustrate something of the psychological complexity of analyzing change scores. Individuals who took the Omnibus Personality Inventory both as freshmen and as seniors were classified on the basis of their freshmen scores. Individuals were classified in the high group if a score was equal to or greater than 60; in the middle group if their score was between 45 and 55; in the low group if their score was equal to or lower than 40. For each of these three groups we then looked at their senior scores. We were interested in how many increased, decreased, or stayed the same for each of the three classifications.

We can now look at the patterns that emerge when we consider the high, middle and low classifications for our four samples. It was evident earlier that the SM scores for all groups (Stanford and Berkeley men and women) increased an average of eight standard scores. When we view the pattern of change, however, we see more clearly that not only are individual scores going up, but also that many are going down.

This pattern becomes even more interesting when we deal with a scale that has a relatively small though statistically significant, mean change. In looking at the data for the IE scale, it is apparent that large numbers of students have decreasing IE scores despite the overall mean increase. In particular, more than 50 percent of those students who were classified as high (standard score =60) has a lower senior score. This finding was true for all four samples.

We now turn to the question of what the scales measure because after we have a clearer notion about this, we can return to the problem of interpreting both the overall mean changes and the differential pattern of changes just described.

Cluster Analysis of the SM and IE Scales

The approach taken to the problem of what a scale measures has varied greatly among different investigators. Here we shall be primarily concerned with item content. More especially we are concerned with the relationships that exist between items in the mind of the individual as he is taking the test. What is the liklihood that if one item is answered in a certain way, another item will also be answered in a certain manner? A statistical technique that permits an answer to this kind of question is Cluster Analysis (developed by R.C. Tryon[6]). Cluster analysis computes all the intercorrelations between a set of items and then develops clusters of items based on patterns of correlations which fit together. These patterns of correlations are considered to be dimensions or clusters and they are open to a variety of mathematical treatments that are similar to those available in factor analysis.

Our use of this technique was prompted by two related interests. It permits us to determine empirically how many dimensions or clusters exist within a single scale and then, based on these dimensions, to observe how individual items change over the four-year period.

The items from the Social Maturity and Impulse Expression scales for the men at Stanford and Berkeley were separately cluster analyzed.[7] The items that comprised the key variables defining the several dimensions appear in Tables 11 to 14.

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[6] Tryon, R.C., The Component Programs of the BCTRY System, Berkeley: University of California, 1964 (mimeo).

[7] The program for cluster analysis permits a maximum of 120 variables; therefore, 24 items from the SM scale and four items from the IE were removed. It will be apparent to those familiar with the scales that large numbers of items are not included in the clusters presented here. Some of these items are added in the oblique cluster solution, but most of the missing items did not have communalities that met the criteria for this solution.

Table 11*

Stanford SM Clusters
(N = 185)

Cluster 1	1961 % True	1965 % True
I have sometimes wanted to run away from home. (T)	36	38
At times I have very much wanted to leave home. (T)	51	55
My home life was always happy. (F)	53	49
I have often either broken rules or inwardly rebelled against them. (T)	34	48
Cluster 2		
I like to read serious philosophical poetry. (T)	36	36
I enjoy reading essays on serious or philosophical subjects. (T)	68	68
I like to discuss philosophical problems. (T)	80	73
I enjoy writing a critical discussion of a book or article. (T)	54	43
Cluster 3		
In religious matters, I believe I would have to be called a skeptic or an agnostic. (T)	37	64
We cannot know for sure whether or not there is a god. (T)	60	75
There must be something wrong with a person who is lacking in religious feeling. (F)	28	5
One needs to be wary of those persons who claim not to believe in God. (F)	18	3
Cluster 4		
Trends toward abstractionism and the distortion of reality have corrupted much art of recent years. (T)	42	56
I like modern art. (F)	34	21

* "T" or "F" in parentheses after each item in Tables 11, 12, 13 and 14 indicates the direction of response; if "T" is in parentheses, "true" is counted +1; if "F", "false is counted +1.

Table 11 (Cont.)

	1961 % True	1965 % True
Cluster 5		
I leave the radio tuned to a symphony concert rather than to a program of popular music. (T)	38	45
I have spent a lot of time listening to serious music. (T)	41	48
Cluster 6		
What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country. (F)	50	28
More than anything else, it is good hard work that makes life worthwhile. (F)	51	30
Kindness and generosity are the most important qualities for a wife to have. (F)	43	35
Perfect balance is the essence of all good composition. (F)	39	23
Cluster 7		
I read at least ten books a year. (T)	82	89
I read a great deal even when it is not required in my work. (T)	58	61
Cluster 8		
I dislike women who disregard the usual social or moral conventions. (F)	51	22
I would disapprove of anyone's drinking to the point of intoxication at a party. (F)	52	17
Cluster 9		
I don't like to undertake any project unless I have a pretty good idea how it will turn out. (F)	37	30
I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer. (F)	25	27

Table 12

Stanford IE Clusters

Cluster 1	1961 % True	1965 % True
I believe there is a God. (F)	75	47
God hears our prayers. (F)	66	37
I believe in a life hereafter. (F)	59	35
In religious matters, I believe I would have to be called a skeptic or an agnostic. (T)	37	64
Cluster 2		
I have never done any heavy drinking. (F)	64	29
I have used alcohol excessively. (T)	16	32
I would disapprove of anyone's drinking to the point of intoxication at a party. (F)	52	17
I enjoy playing cards for money. (T)	44	38
Cluster 3		
At times I have a strong urge to do something harmful or shocking. (T)	46	49
Sometimes I feel like smashing things. (T)	57	59
At times I feel like picking a fist fight with someone. (T)	42	41
I have periods of such great restlessness that I cannot sit for long in a chair. (T)	51	52
Cluster 4		
I am very careful about my manner of dress. (F)	59	38
I do not like to see people carelessly dressed. (F)	47	41
Cluster 5		
I have had periods of days or weeks, or months, when I couldn't take care of things because I		

Table 12 (cont.)

Cluster 5 (cont.)	1961 % True	1965 % True
couldn't "get going." (T)	43	51
I find it hard to keep my mind on a task or job. (T)	20	29
I cannot keep my mind on one thing. (T)	22	28
Cluster 6		
My home life was always happy. (F)	53	49
I have very few quarrels with members of my family. (F)	57	72
Some of my family have habits that bother and annoy me very much. (T)	52	52
I have sometimes wanted to run away from home. (T)	36	38
Cluster 7		
As a youngster in school, I used to give the teachers lots of trouble. (T)	18	24
In school I was sometimes sent to the principal for cutting up. (T)	21	24
Cluster 8		
I would like to hunt lions in Africa. (T)	46	50
I think I would like to drive a racing car. (T)	57	62
Cluster 9		
I have had very peculiar and strange experiences. (T)	38	23
I have had strange and peculiar thoughts. (T)	60	46
I sometimes wake up to find myself thinking about some impractical or irrelevant problem. (T)	46	45

Table 12 (cont.)

Cluster 9 (cont.)	1961 % True	1965 % True
I often feel as if things were not real. (T)	34	24
Cluster 10		
It is all right to get around the law if you don't actually break it. (T)	35	43
It is a good thing to know people in the right places so one can get traffic tags and such things taken care of. (T)	30	29
If I could get into a movie without paying and be sure I was not seen, I would probably do it. (T)	36	44

Table 13

Berkeley SM Clusters
(N = 285)

Cluster 1	1961 % True	1965 % True
I like to read serious philosophical poetry. (T)	29	32
I enjoy listening to poetry. (T)	49	49
I enjoy reading essays on serious or philosophical subjects. (T)	54	58
I like to discuss philosophical problems. (T)	66	74
I like to read about artistic or literary achievements. (T)	37	44
Courses in literature and poetry have been as satisfying to me as most other subjects. (T)	46	44
I enjoy reading Shakespeare's plays. (T)	64	66
Cluster 2		
I have sometimes wanted to run away from home. (T)	43	47
At times I have very much wanted to leave home. (T)	53	61

Table 13 (cont.)

	1961 % True	1965 % True
Cluster 2 (cont.)		
My home life was always happy. (F)	53	47
I have often either broken rules or inwardly rebelled against them. (T)	38	42
Cluster 3		
We cannot know for sure whether or not there is a God. (T)	56	71
In religious matters, I believe I would have to be called a skeptic or agnostic. (T)	40	62
There must be something wrong with a person who is lacking in religious feeling. (F)	21	8
One needs to be wary of those who claim not to believe in God. (F)	24	6
Cluster 4		
I leave the radio tuned to a symphony concert rather than to popular music. (T)	35	40
I have spent a lot of time listening to serious music. (T)	37	42
Cluster 5		
Trends toward abstractionism and the distortion of reality have corrupted much art in recent years. (F)	41	25
I like modern art. (T)	42	45
Cluster 6		
I read at least ten books a year. (T)	80	81
I read a great deal even when it is not required in my work. (T)	54	55

Table 13 (cont.)

	1961 % True	1965 % True
Cluster 7		
I don't like to undertake any project unless I have a pretty good idea how it will turn out. (F)	39	31
I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer. (F)	42	28
I dislike test questions where the information being tested is in form different from that in which it was learned. (F)	40	27
I prefer to have a principle or theory explained to me rather than attempting to understand it on my own. (F)	37	36
Cluster 8		
I like to write my reactions to and criticisms of a given philosophy or point of view. (T)	46	39
Human nature being what it is, there will always be war and conflict. (F)	71	65
Cluster 9		
More than anything else, it is good hard work that makes life worthwhile. (F)	52	36
What youth needs most is strict discipline, rugged determination, and will to work and fight for family and country. (F)	53	22
No weakness or difficulty can hold us back if we have enough will power. (F)	68	47
No normal, decent person would ever think of hurting a close friend or relative. (F)	56	38
Cluster 10		
I dislike women who disregard the usual social or moral conventions. (F)	46	24

Table 13 (cont.)

Cluster 10 (cont.)	1961 % True	1965 % True
No man of character would ask his fiancee to have sexual intercourse with him before marriage. (F)	47	13
I prefer people who are never profane. (F)	31	17
I would disapprove of anyone's drinking to the point of intoxication at a party. (F)	51	24
Cluster 11		
I do not blame a person for taking advantage of someone who leaves himself open to it. (F)	25	17
Most people inwardly dislike putting themselves out to help others. (F)	45	41
Cluster 12		
Each person should interpret the Bible for himself. (T)	82	84
Institutionalized religion is not necessary to maintain a relationship with God. (T)	81	88

Table 14

Berkeley IE Clusters
(N = 285)

Cluster 1	1961 % True	1965 % True
God hears our prayers. (T)	64	38
I believe there is a God. (F)	70	48

Table 14 (cont.)

Cluster 1 (cont.)	1961 % True	1965 % True
I believe in a life hereafter. (F)	56	35
In religious matters, I believe I would have to be called a skeptic or an agnostic. (T)	40	62
Cluster 2		
I cannot keep my mind on one thing. (T)	26	29
I find it hard to keep my mind on a task or a job. (T)	28	31
I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going." (T)	44	57
I often feel as if things were not real. (T)	38	30
Cluster 3		
I have never done any heavy drinking. (F)	67	44
I have used alcohol excessively. (T)	11	22
I would disapprove of anyone's drinking to the point of intoxication at a party. (F)	51	24
I enjoy playing cards for money. (T)	50	40
Cluster 4		
It is all right to get around the law if you don't break it. (T)	41	42
In school I was sometimes sent to the principal for cutting up. (T)	19	23
Cluster 5		
I am very careful about my manner of dress. (F)	65	45
I do not like to see people carelessly dressed. (F)	58	48

Table 14 (cont.)

	1961 % True	1965 % True
Cluster 6		
I would like to hunt lions in Africa. (T)	50	46
I think I would like to drive a racing car. (T)	58	62
Cluster 7		
I have very few quarrels with my family. (F)	51	63
My home life was always happy. (F)	53	47
I have sometimes wanted to run away from home. (T)	43	47
Some of my family have habits that bother and annoy me very much. (T)	61	49
Cluster 8		
I enjoy betting on horse races. (T)	20	24
I enjoy playing cards for money. (T)	50	40
Cluster 9		
I get excited very easily. (T)	28	27
Once a week or oftener I become very excited. (T)	25	25
Cluster 10		
I sometimes wake up to find myself thinking about some impractical or irrelevant problem. (T)	51	49
Sometimes an unimportant thought will run through my mind and bother me for days. (T)	47	40
I have had strange and peculiar thoughts. (T)	67	51
I have often found myself, when alone, pondering such abstract problems as free will, evil, etc. (T)	59	49
Cluster 11		
People would be happier if sex experience before marriage were taken for granted in both men and women. (T)	41	63

Table 14 (cont.)

Cluster 11 (cont.)	1961 % True	1965 % True
Moral codes are relevant only when they fit specific situations; if the situations differ, they are merely abstract irrelevancies. (T)	49	57
The only meaning to existence is the one which man gives to himself. (T)	70	78
Cluster 12		
At times I think I am no good at all. (T)	46	42
I sometimes feel that I am about to go to pieces. (T)	35	34
Cluster 13		
When I get bored, I like to stir up some excitement. (T)	58	56
I like to go to parties and other affairs where there is lots of loud fun. (T)	57	57

A feeling for what the cluster analysis technique accomplishes can be obtained by reading through the items in a given cluster. In most instances an examination of the content makes it apparent why the items are intercorrelated. From this kind of analysis it is also apparent that within each of the two scales, a very broad range of content is represented. It is the breadth of this content which makes the interpretation of mean scores so difficult. Individuals can achieve the same total score by a variety of item combinations, and it seems likely that different combinations of items will have differing psychological meaning.

These issues were clearly recognized by the authors of the tests. In the original papers, they presented a clustering of items based on their own intuitive judgments which are remarkably similar to those produced by the statistical techniques of cluster analysis. For instance, the authors stated the need to "separate the spontaneous from the defensive aspects of the tendency to impulse expression."[8] They also described in detail the complexity of the Social Maturity scale and pointed out the many sub-clusters of items that were part of the total scale.[9]

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[8] Sanford, N., Webster, H., and Freedman, M. Impulse Expression as a Variable of Personality. Psychological Monographs, #440, 1957.

In the OPI research manual the Social Maturity scale is described as a measure that reflects a certain approach to the world, rooted in the personality structures of the individual and characterized by flexibility of thought and capacity to see the world in an unprejudiced way. The results of the cluster analysis suggest that it is important to distinguish between the possible two levels of meaning in response to an item. The attitudes an individual holds may reflect (1) his personality structure or they may reflect (2) some of the predominant themes of his family or some other segment of his past or current environments. We would expect the entering freshman to be still very much involved with the attitudes that he has learned at home. By the time he is a senior he has learned from his fellow students and the faculty that the prevailing attitudes in society are much more diverse than he might have imagined. The SM scale as a whole does not allow us adequately to distinguish between these two sources of attitude formation and change. However, the cluster analysis does offer some clues by helping us separate those items which seem to be more responsive to change resulting from the process of socialization from those items which are more reflective of the personality structure of the individual.

We can see that many of the clusters showing change are made up of items that reflect themes on which many segments of society have taken a liberal stand or are undergoing a liberalization (e.g., Cluster 6, Table 11). For example, the simplistic view of human behavior is frequently challenged by the assertion of man's complexity, including his being driven by needs that he is unaware of. Even in the popular culture, as expressed in magazine articles, movies and the folk-rock music, there are portrayals of man's complexity. In Cluster 6 Stanford and Cluster 9 Berkeley, we can see some evidence for college seniors to view human behavior in less categorical terms.

Still another question can be raised about the factors that contribute toward the change we observe. There is the likelihood that this shift away from a simplistic view of behavior is also reflective of some developmental process that is rooted in the personality of the individual. At this point we cannot assess the relative strength of influence. However, we have suggested that socialization is more likely to be influential because change resulting from personality development is very difficult to achieve.

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[9] Webster, H., Sanford, N., and Freedman, M. A New Instrument for Studying Authoritarianism in Personality. Journal of Psychology, 1966, 40, 73-84.

This suggestion receives further support from the fact that when we look at those items which are more likely to be reflective of personality development, we see less evidence of change. For example, there is not very much change in the students' attitudes toward problems which have a high degree of ambiguity or lack of certainty about the outcome (Cluster 7 Berkeley and Cluster 9 Stanford). Intellectual growth requires that the individual is willing to venture into areas of thought where he cannot know in advance what his conclusions will be. It is this capacity to tolerate uncertainty which, as was indicated earlier, is intimately tied to personality structure and which is hard to develop because of the anxiety associated with uncertainty.

The cluster analysis also helps to illuminate the findings for the mean change scores on the IE scale (Tables 12 and 14). Here, in addition to the problems just described, we find that the scale itself reflects some of the contradictory attitudes prevalent in our society with regard to the handling of feelings and impulses. In some sense there is a prevalent view that feelings are dangerous, unpleasant, and shameful. At the same time, feelings of excitement and adventure are highly valued. The Impulse Expression scale reflects both these realms of experience.

We noted earlier that many students who originally had very high IE scores had lower scores as seniors. It seems likely that the change for individuals who start at different points of the IE scale will be quite different. For example, the freshman who is "wild" gradually gains control over himself and feels more comfortable, while the freshman who is exposed to a very narrow range of stimulation gradually tries out many new things and finds that he likes some of them.

Change in Item Frequencies

Those working closely with scales such as ours recognize that they have great conceptual richness and with this goes the danger of lack of precision or specificity in measurement. By casting a very broad conceptual net we will catch all those individuals who have something in common. We also will be losing something in the precision of our classification. In an effort to look for more refinement in the way we can interpret test results we will next examine the change in item percentages of the empirical clusters in more detail. More specifically, we will approach this search for greater refinement in interpretation by examining the frequencies of response to items in the freshman year and in the senior year. We have used the groupings of items that emerge from the cluster analysis as a basis for organizing these data.

Earlier we pointed out that both the Stanford and Berkeley men had a large and significant increase on the SM scale (Tables 5 and 8). Unless we consider which sets of items contributed to this increase, we are likely to conclude that when we see similar mean changes the psychological processes accoutning for the changes are also similar. For example, Cluster 1 for Berkeley (Table 13) and Cluster 2 for Stanford (Table 11) both contain sets of items centering on intellectual activities. For the Berkeley men there is a slight to moderate increase in expressed interest in serious intellectual activities. At Stanford there is some evidence of a slight to moderate decline. The issue is further complicated by the fact that the men at the two schools had different initial endorsement frequencies on some of these items. Stanford students tend to start off at a higher level of expressed interest in intellectual activities than Berkeley students. However, by the time of the senior year, there is much more similarity between the two groups of students. This finding raises a host of questions. However, at this point we must view it as suggestive rather than being conclusive. The need for caution stems from the fact that we are dealing with relatively few items. In addition we do not know if they represent a broadly defined attitude toward the use of intellect or a more circumscribed attitude toward philosophical and critical thinking.

Another set of items which are central to evaluating what happens to individuals while they are at college appear in Cluster 7 for Berkeley and Cluster 9 for Stanford. Broadly defined, they are concerned with the danger associated with the free use of thought. At Berkeley we see some decrease of the perception of this danger, while at Stanford, the results do not reveal any consistent trend. Once again there is the problem of different initial endorsement frequencies.

The data from the SM scale also reflect a great many similarities in the kinds of changes that are taking place. For both groups of men, there is a sharp decrease in puritanical attitudes toward a wide variety of behaviors and beliefs. Along with this there is also a decline in conventional religious attitudes.

In many respects, the Stanford and Berkeley men are even more similar in the changes that occur on the IE scale than they were on the SM scale. As we pointed out earlier the authors of the test recognized that both the spontaneous and the defensive aspects of impulse expression were built into the scale. When we see a moderate increase in the total score, we cannot be sure which component is changing. Furthermore, when we see large numbers of students who originally had a high score ending up with a lower score as seniors, we are left with questions about what is really happening. Although no clear answers are available we can obtain some clues from looking at the clusters of items and the changes in frequency from 1961 to 1965. Once again we find a sharp decrease in conventional religious attitudes for both Stanford and Berkeley men (Cluster 1, Tables 12 and 14). There is greater tolerance for alcohol consumption on both campuses with some evidence for slightly greater use among the Stanford men.(Cluster 2, Table 12; Cluster 3, Table 14). Responses to these items lead to an increase on the IE scale.

There is a sharp decrease for both groups of men in their reporting of having strange and peculiar thoughts and experiences (Cluster 9, Table 12; Cluster 10, Table 14). The decrease in response to these items might suggest that some of the disturbing emotions of adolescence were quieting down by the senior year. When we look at other clusters, we see a marked increase in feelings of distractability (Cluster 5, Table 12; Cluster 2, Table 14) and little change in feelings of anger and uncontrolled hostility (Cluster 3, Table 12).

A possible explanation for these findings might be the socializing effect of the college experience in combination with the psychological movement away from the adolescent years. In general it is more socially acceptable to be intermittently angry or to be distractable than it is to have strange and peculiar emotional experiences. If this is indeed happening, then there are several consequences which have an important bearing on the educational process. Earlier we discussed the importance of integrating the emotional and intellectual life of the individual in order to insure meaningful and creative work. This integration can only take place in individuals who are encouraged to be aware of their feelings--even disturbing ones. If the social climate works against this kind of awareness, then it tends to perpetuate the split between the world of intellect and the rest of life.

There are a variety of other questions which can be generated by a study of the results reported in the tables. At this point, we could only discuss some of the complexities of the psychological phenomena which are hidden by the total scale scores.

Summary

This paper has to be viewed as a progress report. After reporting the fact that significant differences do occur over the four-year interval of college, we have been prompted to raise many questions for which we do not have full answers. Some of these questions deal with matters of theory and facts while others deal with methodological issues.

It was necessary to raise the question about change resulting from socialization rather than personality development because this seems central to the study of the impact of the liberal arts college. While we were able to place our results in some perspective by introducing this issue, it is also clear that we are far from having any clear answers. Many personality scales themselves have not been constructed in a way which permits a clear distinction between attitudes derived from long-standing personality dispositions and attitudes that are reflective of a particular social climate.

Although the socialization vs. development issue can be discussed in abstract terms using mean score changes, this level of generality is useful only for clarifying certain conceptual problems. When we want to understand what is happening to individuals in a given college, the emphasis on analyzing mean scores and the difference in mean scores can lead to a variety of interpretative pitfalls.

At the level of analysis where we just view the variability in the direction of change, important questions come into sharper focus.[10] This is illustrated when we observed that more than half the individuals who had high Impulse Expression scores as freshmen had lower scores as seniors. While there was an overall mean increase in the IE score, it would be misleading if we then extrapolated from this and made assumptions about the change experienced by all individuals.

The issues become much more complex when we begin to look at the internal structure of the scales. Here we touch on fundamental questions of how to conceptualize personality and how to measure the constructs which make up personality theory. In the data presented here, examining the psychological complexity of the scales led us to consider several questions which otherwise would have been missed.

Given the finding that the personality scales we used could be broken down into a variety of empirical clusters, we then had to consider whether there was a differential amount of change from cluster to cluster. Thus we found that in the SM sclae, the clusters with items touching on social standards and mores changed more than the clusters dealing with intellectual dispositions. When we see a mean change score for Social Maturity (SM), we tend to think about its central defining characteristics: "High scorers are not authoritarian, and they are flexible, tolerant and realistic in their thinking." The data we have presented suggests that it is possible to have a large mean score change without the items which most directly reflect these central defining characteristics changing very much.

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[10] It should be pointed out that the analysis of mean scores can be useful when dealing with a group that is homogeneous with respect to some important criterion or when trying to evaluate the homogeneity of a group (for example, see Chs. V, VII, XII in this volume).

The complexity of the Impulse Expression scale also led to questions about the nature of the change that was occurring. Although the test constructors recognized that there were at least two major aspects of impulse expression built into the scale, this has often not been taken into account in the interpretation of mean scores or mean score changes. The cluster analysis and the examination of the differential changes in frequency of response has revealed additional details for the interpreter. There is evidence of a marked increase in those items dealing with the spontaneous, though conventional, aspects of impulse expression (e.g., more drinking), and changes with respect to the defensive aspects (e.g., fewer bizarre thoughts but a greater feeling of distractability). After four years of college we see evidence for a shifting around of the modes of expression, but the continued presence of a good deal of psychological discomfort.

In this chapter we have tried to encourage caution in the use of personality scales while at the same time we have tried to interpret and understand our results. This somewhat contradictory position reflects the dilemma of the researcher who deals with complex human problems. There is an urgent need for answers, and policy decisions cannot wait until the researcher is satisfied with his means for providing answers. Nevertheless, there are a host of complex methodological issues which have yet to be solved.[11] It is necessary to act on the basis of what we know, but we must also continue to know the basis for our actions.

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[11] In addition to the four problem areas here focused on [(1) problems of interpreting mean score changes for large heterogeneous groups, (2) variability in direction and magnitude of change for individuals with different initial scores, (3) the internal structure of the scales, and (4) different patterns of change in item frequencies], there are other measurement and statistical problems in dealing with psychological change. A volume edited by C. Harris, Problems in Measuring Change, Madison: University of Wisconsin Press, 1963, provides an excellent introduction to many of these problems. Several of the chapters start with assumptions about the importance of a coherent theory of measurement in the social science; they then go on to describe the distance we are from having such a theory. There are many illustrations of the statistical and methodological pitfalls which plague the researcher studying change.

Chapter XIV of this report also deals with some of these issues.

Chapter III

CASE STUDY: THE FORCES OF DEVELOPMENT AND CONSTRAINT IN THE BOY'S SITUATION

Peter Madison, Ph.D.

The emerging view of development in the college years is one of a dynamic interaction between stability and change. As Nevitt Sanford has expressed it: "...we have to say that in order to induce desirable change - toward further growth or development or toward greater health - we have to think in terms of what would upset the existing equilibrium, produce instability, set in motion activity leading to stabilization on a higher level." [1]

This chapter, and the next, will examine the interaction of the forces that induce development, or constrain it, in the case of two subjects, Bob and Pam, whose cases happen to show well the constant balancing of stability and change that characterizes personality development in college. The incoming student typically welcomes the college experience and often openly hopes that he will change in directions he regards as improvements, even while wondering whether he will be adequate to the many challenges he knows lie ahead. The young person's strong drives to explore, to open himself to new experience, are balanced by protective security maneuvers at points where the instability induced by change become too great, followed by new ventures as soon as sufficient equilibrium is restored to permit further exploration.

In ways that are largely unknown to the student, his pre-college past enters into the developmental picture. The new freshman is intensely aware of his pre-college past - he often shares it with friends and may reflectively return to it in quiet moments - but he tends to think of his past as consisting of his memories, and when he shuts off his reminiscences and turns to the present, he does not consciously experience his contemporary feelings and actions as being related to the past; the immediate situation appears to him to require the responses he is so reasonably making. But the past does enter in, often in the form of unrecognized constraints on development, and much of the student's effort is spent in discovering that the automatic carry-overs from the past don't fit, and in differentiating the present from his misperception of it sufficiently to achieve a different experience than he had before, and, out of this, to change and grow.

Both Bob and Pam are typical students in terms of the test score dimensions that governed the selection of the student sample.

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[1] Sanford, Nevitt. Self and Society. New York: Atherton Press, 1966, P.37

They were in the middle group on both the Impulse Expression and Social Maturity scales of the Omnibus Personality Inventory. From this standpoint, they are representative of the students at a selective college. Bob's case will be dealt with in the present chapter and Pam's in the next.

Bob's case is interesting because he made such great developmental strides relative to his classmates, and because, as a freshman, he seemed an unlikely candidate for such growth. In his first interview Bob looked like an inarticulate, constricted, vocationally-oriented engineering student who would retreat to his room with his slide rule, grind for four years, take a technical job with a large company upon graduation and settle down to the materialistic, family-centered life of the suburbanite. That is not what happened. After an initial shock period, Bob began to develop along dimensions where he felt the least constraint and where the college environment stimulated him to do so. In the end he was able to directly challenge the strongest constraint of all: his feelings that he must fulfill his childhood-developed conception of what his parents wanted of him before he could respond to what he wanted for himself.

While Bob's story is about his development as a person, much of the presentation of his material will be organized around his deliberations as to what to major in and what to do with his life after college. These career aspects of the student are, of course, aspects of his personality, so that it is natural enough to treat personality development in terms of career plans. There are other organizations one might adopt but there are advantages to choosing career decisions as an organizing framework for theoretical analysis. One is that this is a principal form in which the dimensions the theorist refers to as "personality" appear to the student with his own life - and to the educator who want to know about personality in college. Another advantage is that career plans represent a dimension that is common to all students, something they are under constant pressure to attend to and do something about, and something that is of central importance to them. For most boys the question of what to major in and what to do with their lives after college deeply involves almost every element of their make up. The personality theorist who keeps his eye on this dimension isn't going to miss much of the action.

These two chapters are written as a unit. The present one on Bob mainly presents case materials. The second chapter presents both the case material for Pam and a discussion of theoretical and educational implications of both cases.

THE INITIAL PLAN: CHEMICAL ENGINEERING

As is usual with high school seniors, Bob settled upon his initial choices of college major and career without benefit of any knowledge of, or experience in, his proposed profession; nor even knowing very clearly why he chose it:

Fall, Freshman Year. "I decided on chemical engineering as a major during my senior year in high school. As a matter of fact I decided when I was filling out my application that fall. We were asked to put down what we intended to major in. Since I had such an interest in science and math, I felt my major should be somewhere in that category, and I liked chemistry so well -- I thought that would be a good way to start.

"After I got into algebra in ninth grade, I'd always thought that my future plans should have something to do with math, because I've always liked math, and always did quite well in math. But I hadn't really considered chemical engineering until my senior year. In my junior year, the only thing I was sure of was that it was going to be something in science and math. I enjoyed general science and I enjoyed physics and I enjoyed math so.

"I don't have any idea as to why chemical engineering, rather than chemistry, physics, or some other science. As a matter of fact, when I put down chemical engineering I hardly knew what it was -- except that it dealt with chemistry. I still think that's kind of my general idea of it. I can go ahead and take courses for at least two years and either become a chemist or a chemical engineer. I think I probably put down chemical engineering mainly because I enjoyed physics, and a chemical engineer employs more math and more physics than does a pure chemist."

(What, in chemical engineering, do you think you might want to do some day?) "I really haven't any thoughts - I'm not far enough into it as yet."

(But as you envision it, what do you see a chemical engineer doing that might be of interest to you?) "Well -- there are many things. I've had interests in architecture, and one of the important phases of chemical engineering is the design of machinery for use in the chemical industry -- and so on and so forth. And that somewhat interests me. I'm also interested in research -- which is more along the line of what a pure chemist would do; but, still, it comes up in chemical engineering."

(Do you have any general ideas about the kind of place you would like to work in when you become a chemical engineer?) "Well, it's a little premature. I haven't had a chance to work in any place that employs large numbers of men. I've always worked in small groups, so I might prefer that. I don't know whether I would enjoy working in a large corporation just as one of the cogs."

Of course, such vagueness about careers that Bob showed is not unusual, especially for boys who have grown up in a small and culturally isolated community as Bob had. His lack of information was such that he could think of chemical engineering as a field that would allow him to fulfill an architectural interest, and he knew too little to realize that such a vocation would, inevitably, get him into a large organization. Even he could see that his research interests would more likely be met by chemistry than chemical engineering. But these inconsistencies are characteristic of decisions in matters on which a person has no experience and very little information, and which, at the same time, represent an intersection point for diverse and powerful forces. The fall-term freshman year starting plan is not to be taken as an intention about what the student seriously means to do with his life so much as it is an effort on his part to feel that he has a "place" in the college and in society's scheme of things. He has to integrate his home and high school values with such a possible "place", and the fit of the whole that the eighteen year-old comes up with is, as in the interchange from Bob's material reproduced above, not likely to bear up well under scrutiny.

In the usual course of events, the starting plans soon begin to dissolve under the impact of college and give way to a new synthesis better suited to the student's purposes. Bob's case is of special interest just because, for a long time, that did not happen, and when it did it was something of an explosion. After an initial shock period during which he closed up, Bob began to develop in ways that made the starting plan less and less suited to his maturing self, but he clung resolutely to chemical engineering for three years. When the dissolution finally came late in his junior year, it was overwhelming. Bob graduated, liberated from a prematurely-frozen life plan symbolized by chemical engineering, but too late to re-synthesize around an alternative before graduation. The three-year tug-of-war that went on served to polarize all the forces of development and constraint in an unusually clear way, making possible their delineation through Bob's story. First, let us look at the struggle as it appeared in relation to the specific question of what to major in and what to do about a career. Then we will examine the forces of development and constraint that were impinging upon the career decision during the course of Bob's college years.

Three Years of Struggle With the Plan to Major in Chemical Engineering

At the end of his freshman year, Bob was adhering to his starting plan. His strategy, widely used by students, was to keep alternatives open, delaying decision as long as possible while accumulating experience and judgement on the basis of which to make it when an unavoidable choice point arrived: [2]

Spring, Freshman Year. (What has happened to your thoughts about a major? In the fall you were vacillating between chemistry and chemical engineering.) "I still haven't made up my mind completely. I have checked my curriculum for the next two years fairly carefully and it's not going to make any difference as far as whether I major in chemical engineering or chemistry. So, it just depends on what happens, having made no decision between the two as yet."

By November of his sophomore year, the first explicitly-recognized doubts had begun to appear:

Fall, Sophomore Year. (Are you still vacillating between chemistry and chemical engineering?) "Actually, I'm kind of wobbling all the way around. I've had so much trouble -- I'm still enjoying chemistry courses but I'm having quite a bit of trouble with the organic chemistry, mainly because it is a lot of memory work and I find it hard to study for the kind of test the instructor gives. I'm just not sure that chemistry is exactly what I want. I don't know what it is that I want. Once in a while I think that I'd do well in economics.

(Is it a matter of what you're best suited for, what you would do best in?) "Well, what I would like best."

But by spring, Bob had returned to a firm stand on chemical engineering:

Spring, Sophomore Year. (What are you majoring in and why?) "I have decided that chemical engineering is the right field. I am taking organic chemistry. I am also seeing more of the mechanical side of the field. The job opportunities and pay are better in chemical engineering. The appeal of chemical engineering is the chance to travel (for petroleum engineers, which I might go into), outdoor work, good money and opportunities for advancement.

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[2] This "many-option coping mechanism", as I have called it in Personality in College (Addison-Wesley Publishing Co., Preliminary Edition, 1966, Ch.3), appears to be one of the main ways in which college students deal with important decisions under conditions where relevant facts are not known.

Note the interesting addition to Bob's perception of chemical engineering: that it will allow him to travel, a theme which frequently recurred throughout college together with the larger theme of "freedom" of which the appeal of traveling seemed to be a part.

Over the summer, Bob seems not to have wavered; here are excerpts from his fall interview:

Fall, Junior Year. (What is your major?) "Chemical engineering. I plan to go on for a master's in chem engineering."

Bob had, however, introduced a significant modification of his plan to be a chemical engineer: he would go into management, where he could satisfy his newly acknowledged interest in working with people rather than chemicals:

Fall, Junior Year. (Have your interests changed since high school?) "I'm sure they have. When I came, I said I wanted chemical engineering because I liked math and I liked chemistry and that was my sole basis for choosing chemical engineering. Since coming to college, I've learned what a chemical engineer actually is, and what he does. And I've changed my mind in that, when I came to college, I thought about research as being my goal; now I'm more interested in management, or the legal side of this. I still want to go through with chemical engineering and find out for sure. I'm still in the process of making up my mind what I really want because of having had no practical experience in the occupation. Next summer I'll get into something that will give such experience."

(What accounts for that shift from research into the management and the legal side?) "Well, I don't know. I enjoy lab work but I can see that I would get tired of being in the lab day after day washing bottles and so on, and of research which would involve lots of library work, lots of reading and compiling of materials. Going into the laboratory would be a little more interesting, but I do think that I enjoy being a little higher up - where the overall picture was a little more clear - and I like working with people; besides that, there's more money in management, or in the legal side."

(What made you realize that you'd rather do the one than the other?) "Just the fact that I have done the lab work and I can't really picture myself as wanting to do it the rest of my life. I've talked to some engineers and people who have been involved in that sort of thing, and they say that management is more rewarding financially. For getting ahead and for dealing with people, management is the better side of the situation."

By the end of his junior year, Bob found chemical engineering leaving him "cold."

Spring, Junior Year. (Let's start with how things have been going since we saw you last fall.) "They haven't been going quite as well as they should be. I don't know whether it's just finding out that maybe engineering isn't what I want or not, but I've been very disappointed in all of my chemical engineering courses this year. I'm not doing well because of my attitude. As it looks right now, I'm just barely going to squeak by on my scholarship grades[3] again this year. It's kind of bad."

(You think it's related to your lack of interest in the courses?) "Yes, I think it definitely is. I know I just have been unable to work, unable to get any interest at all in anything. I have to take the chemical engineering courses and I have yet to get above a "C" in any of them. The only reason I've been keeping my average up is that I'm doing all right in some of the chemistry courses. But chemical engineering is kind of leaving me cold."

(Has this led you to think about your major?) "Yes, it certainly has. Of course, at the end of my junior year, it's a little difficult to switch over, so I think I'm going to go ahead and get my degree in chemical engineering and then I can always get a job. The way things look right now, a chemical engineer is not what I want to be. The courses that I'm taking are indicative of the type of work that I'd be doing and if I don't like the courses, I won't like the work."

(You've been debating this for some time, haven't you, chemistry or chemical engineering?) "Yes. I'm still not that interested in chemistry, straight chemistry. The only thing that would be open there would be teaching and I'm not entirely sold on teaching."

(So you really are up in the air about your career plans?) "I just have no idea at all what to do."

Here are how things looked in the fall interview of Bob's senior year:

Fall, Senior Year. (Well, what is your first impression of the senior year?) "It is quite different in that I did switch my major. I'm taking two language classes, Art 1 and Music 1. I'm taking no chemistry. All my remaining chemistry courses come later in the year and I will have no straight engineering courses since I dropped chemical engineering."

(What led to the change?) "I was tired of taking these required engineering courses which didn't seem to have too much that would be applicable to chemical engineering - they were simply departmental requirements. And I have been wanting to take a language all the way through college and just never had the time for it. So I finally decided I might as well get a BS. in chemistry, since I am now thinking about going into medical research - I need a chemistry background for that."

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[3] Bob's scholarship, which covered something over half his expenses, was contingent upon maintaining a C+ record.

(You are now thinking about medicine?) "Well, the research side - medical school, or at least graduate school in biochemistry. I'm not really worrying too much about it yet as I have to take a year or two in biology before I could get into either medical school or graduate school."

(So your plan now is to stay on in college?) "Not here - I want to go back East. If worst comes to worse, back to my own state university for a year or two."

(To complete pre-med requirements, biology requirements?) "Biology, and a little political science."

(Well now, this is a real change isn't it? How did you...) "I got to looking over my courses last year, which courses I had enjoyed and which I hadn't, and I found I hadn't enjoyed most of it...particularly those that were on the engineering side."

(But you didn't enjoy chemistry either.) "Well, part of chemistry - the physical chemistry I didn't care for. The chemistry I had had the two years before had been quite enjoyable. Actually, I would like to have continued with the chemical engineering course, if I could have worked it in - but I couldn't. It would have meant continuing in thermodynamics, fluid flow, and things that were strictly the chemical engineering side of the situation. The courses that really threw me off were courses like circuits and electronics, statics and dynamics. These were part of the curriculum just because the Engineering Department required them for graduation. If chemical engineering were in the Department of Chemistry, those requirements undoubtedly wouldn't be there."

(But I thought it was more than that, Bob, I thought you couldn't see yourself as either a chemist or a chemical engineer?) "Still can't." (LAUGH)

(But medicine is a switch.) "Well, it's still laboratory work, and it's something I might have gone into anyway."

(So you are not sure?) "I'm still not sure - I'm going to take the Peace Corps test and may go into the Peace Corps before I go on. I don't know."

(You are pretty much up in the air then?) "Probably one of the main reasons I did decide to go into chemistry is that the change gave me the freedom finally to get a language, which I wanted, and also made it easier - not necessarily load-wise - but easier on me the rest of this year."

(Did you find the engineering too hard for you?) "Not enjoyable."

(How about the grades?) "They showed the lack of my enjoyment. (LAUGH) They weren't good at all."

(Good enough to keep your scholarship?) "I lost a good part of it last year. I have enough to get me through this year and that's about it."

(Why are you so keen on languages?) "Well, I enjoyed high school Spanish and always regretted that I hadn't been able to take any more Spanish, or at least some type of language - just interested, I can't really explain it."

(Am I right - that underneath this was a kind of feeling that you weren't learning some of the things that you wanted very much to learn?) "Right. This quarter I am really enjoying every course."

(But up until recently you didn't quite have the courage to make the break; you felt it wouldn't be terribly practical to do so?) "I don't know whether it was courage, or what, I really don't know but I finally decided this last summer."

The eve of graduation found Bob's starting plan dissolved and his plans for his future confused:

(Let's start out with what's been going on since the last interview) "Well, I still don't know exactly where I'm going. (PAUSE) I still don't know exactly where I'm going, and it's still pretty difficult to say, yet, but at the present the only thing I'm worried about is graduating. I just don't know yet exactly what I'm going to be doing next year. I have three or four different plans which I haven't really decided on yet. I still want to take some biology, some more language, to see where my field of interest is. I'm still considering three colleges to go to. What I might do is to work for six months and then I'll be able to afford to go to an Eastern university. It's not so much the difference in universities as the difference in country, people and so on, that I want. I'd like to go back East for a while. I have a good friend who is trying to talk me into going to France with him, so it's possible I might do that too; or work for more than six months so I'd have some money. But I don't really know yet. (PAUSE) (LAUGHS) It's kind of hard to say."

The confused state of Bob's career plans throughout his senior year shows what a problem a major change of direction can be when it comes so late in college. As a senior Bob was just beginning the kind of exploration of his own interest in language, biology, music and art that would have been desirable in his first two years. But Bob's developmental time table and the academic one were so out of phase that there was no chance to test out these new directions sufficiently to find out where his enduring interests lay, or to regroup his forces around a new career plan. He graduated, liberated but unintegrated, an outcome that may be more frequent than we know.

As we will see, there's good evidence that a part of Bob wanted to make such a break-out almost from the beginning, and the whole course of his development in college was in a direction opposed to the narrow technical role and educational plan that he came with and stuck to as if persisting in it was demanded by some aspect of his inner being. Looked at in the light of the whole situation, which is yet to be presented, Bob's shift out of chemical engineering was very desirable from an educational standpoint; one could only wish it had come earlier. His story shows the ineraction of powerful developmental and constraining forces in a struggle that reveals much about both, which is why his case is so interesting. Let us look at the forces arrayed on each side.

THE FORCES OF CONSTRAINT

The evidence that Bob persistently wanted to move in directions that were at variance with the course he set out upon, and clung to, is all too clear to the outside observer who has the advantage of being able to look at the whole four years of his college life, but what was happening did not look at all clear to Bob from within. There were strong forces at work that acted to keep him on the course which he began. Let us look at some of these.

Background Shock

The top graduate of a tiny high school in a rural, culturally isolated setting (Bob's home was located six miles from a small town) who enrolls in a large, selective college full of very able and culturally sophisticated students invites (in the usual case, unknowingly) a set of shock experiences capable of unhinging almost any personality, and guaranteed to shake even the most stable. In cases like Bob's the shocks are multiple, the first can be thought of as a generalized "background shock", the sudden realization that one's own background is limited and inadequate relative to the new environment in which one finds oneself. It is hypothesized herein that one effect of such a shock is to make the student feel insecure and less open to developmental experiences. Here is how Bob described his first response to college as he looked back upon it from his senior year perspective:

Fall, Senior Year. (How are you different from when you entered college?) "For about the first two days, I had a pretty high opinion of myself, and from there on out for the rest of the year I felt like a midget among the giants. It was a case of a small frog in a small pond becoming an even smaller frog in a huge pond. In high school I was a big man. I came down here with the thought that there would be no problems in college, and that I had a pretty good background; when I got here I found out that this wasn't very true."

(Academically mostly?) "Academically, socially - just all around. Even right there from the first I would run into people who had definite ideas about politics and I hardly even knew who the people they talked about were, and this sort of thing. It didn't seem like I knew very much; my confidence level wasn't very high. (PAUSE) I still don't, in a lot of respects, have an idea of where I am, what I think, but I do have more confidence in myself that when I do make up my mind, I have a right to say so and to feel that way."

(Was it in terms of other students that you felt inferior, or in terms of what is to be known and understood?) "I think it was mainly in terms of other students, because that was easier to see right there. Well, in general, it was kind of an overwhelming situation. There is an awful lot to be known that I didn't have an idea of. It was most easily seen by talking with the other students. I was supposedly on their level and yet I didn't seem to be."

(They knew so much more? Or they had many more exposures, or opportunities, advantages, experiences? Was it because of their social class?) "That - because of the type of community they came from, I think that had a lot to do with it. Mainly I just didn't realize how much I had missed by being in a small community."

Here are some on-the-spot feelings from Bob's freshman year:

Fall, Freshman Year. "I went to a small high school of less than two hundred students -- I was able to get along pretty well and didn't have too much competition. My first impressions of college didn't actually come until the end of the week -- we were so busy. I mainly remember being impressed, that first week, by the rate at which things came at me, and the largeness of the campus. I came from a small town thirty miles away from the nearest small city. The number of students impressed me; although I was mentally prepared for a large college, I wasn't prepared for the hundreds of students."

Spring, Freshman Year. (How would you like to be different as a person than you are now?) "I'd like to be a little bit sharper, to think a little more quickly than I do...to stand out a little bit more...I feel somewhat subdued by the fact that there's so much talent here. I don't feel nearly as competent as a lot of these people are."[4]

Identity Shock

"Background shock" is a particular form of identity shock. Discovering how inadequate his background was relative to other students would have been a difficult enough problem to deal with. But to find, as well, that one is no longer not only not first, but not even in the running, academically, politically, or athletically, produces an effect so massive that one must speak of something like "identity shock": a fundamental challenge to the bases of one's self-esteem.

Athletic Failure. Bob's failure in athletics was especially difficult for him to take:

Fall, Freshman Year. (What about sports, the cross-country, how is that coming?) "Oh, kind of medium here at college. I was tops in high school, and did well in the state, but the competition here -- well, there are about ten on the team -- it's been a little, you might say, shaking to me."

Fall, Junior Year. (Are there any particular difficulties or disappointments that stand out?) "The outstanding disappointment would be that I was never able to do well in track."

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[4] Bob was reporting how he felt about his competence. Objectively, as measured by the Scholastic Aptitude Test, Bob was more competent than his classmates. His Verbal Aptitude Score was 630 and Mathematics Aptitude 797 as compared to an average of 617 (SD 70) and 652 (SD 71) for the men in his class.

Spring, Junior Year. (How come you dropped out of track?) "It was more a matter of frustration than anything else because I worked very, very hard at track all during the last summer and got down to a point where I was running better than I ever had in my life. I could run a 4:20 mile wihout any problems; I could probably have made the squad in just about any other college, and here I was running ninth on the track squad, so it just got kind of frustrating - seeing me finish from a hundred yards back all the time. I was usually good enough to be the first man left home on the travelling squad."

Academic Shock (Fall, Freshman Year) (What do you think is the most difficult aspect of college for the entering student?) "For me, it's facing up to the competition, the high level of competition. To be frank, I never had much competition in high school. I've always been able to get by with a lot less than I have to put up here. I'd say, right now, that is the most difficult."

"College is different from what I had expected. I hadn't had to work nearly as hard in high school and I wasn't prepared for this difference. I knew I was going to have to work harder but I didn't think it would be as rough as I found it."

Spring, Freshman Year. "The first semester in college was an eye-opener and a real shock. Just getting here and getting bad grades -- not knowing how to study."

Spring, Senior Year. (Looking back at your life before college, what are some personal characteristics in which you differed from the way you are now?) "One thing that was characteristic of me in grade school as well as the rest of high school was...being on top..."

(It seemed important to you to be at the top?) "I think so, I think it was...(VERY LONG PAUSE)...sure has been a change. I don't know, it is still a good feeling...when you're among the top people..."

Bob graduated with a "C+" average for his four years. His first term grades averaged "C-". His high school academic record had been so distinguished that he was offered large scholarship inducements from the country's leading universities.

Political-Social. Bob, who had been student body president in high school, held no offices his freshman year in college; and had practically no social life. He later described his freshman year as "study, study, study," and spoke of being confined to a "cubicle in the dorm."

That Bob must have suffered massive blows to all of his high-school associated bases for self-esteem seems plain from the foregoing account. What the effects of such cultural and identity shock were is not directly disclosed by the interview data. One can guess, from looking at the overall pattern of Bob's response to college, that it may have had several effects. As the material on Bob's choice of college major and career suggest, Bob stuck to his starting plan in a way that suggested a very great hesitance to change. As we will see, there was plenty of evidence available to Bob that could have told him he was on the wrong track, especially his early and persistent interest in courses outside of his technical field. It is hypotherized here that the massive freshman-year shocks made Bob feel so insecure that he was not open to the all-too-plain evidence that he belonged elsewhere. Such shocks usually have the overall effect of not only "closing-up" the person but leading him to cling in an exaggerated way to the remaining bases of security. As we will see in a section ahead, for Bob, this meant sticking closely to what had worked well at home: doing what he thought his parents wanted of him while postponing his own wishes until his obligations to home had been taken care of. As we will see, he interpreted his obligation as sticking to chemical engineering and graduating with what he and his father considered to be a security-guaranteeing degree in his pocket. In the meanwhile, his own inclinations must be suppressed and put off - time for what he wanted was "later."

But then, there were many other constraining factors at work as well, let us look further at these.

Vocational Orientation Toward College Education

One of the persistent differences between the educator's conception of a college education and the one held by the incoming student (particularly students from culturally-limited backgrounds) is that the faculty and administration think of the process as one of "liberating" the student, of opening him up to the whole range of man's culture and knowledge, of acquainting him with the nature of man, the nature of the biological, physical and social order of the world and society, concerning him with man's great problems and the history of his past attempts at solving them, interesting him in wanting to do something about these, and generally turning him into a mature adult who understands the world and wants to participate significantly in it. Many freshmen, and even more, their parents, have no such thought about the purposes of college, or, if they do, such purposes are seen as incidental, as "extra benefits" beyond the main business, which is to qualify oneself for a good job so that one can have security and economic benefits for one's self and one's future family. Bob put it very well when he arrived:

Fall, Freshman Year. "I've always figured that I was going to have to go to college to get what I wanted out of life. I don't think the job opportunities, and the chance to pick up security, are offered to the non-college person."

(And you're thinking that what you want out of life is security?) "Security and a chance to be able to support a wife and children in a good community, and be able to give them what I consider are the necessities, and more...I'd like the kind of family that can afford to have television if we want it; hi-fi if we want it; a dishwasher, and so on and so forth."

Probably more than any single factor, the vocational orientation to college interferes with the broader purpose that educators hope for as the outcome for their four years of effort to see that the student becomes an educated person while fitting himself for participation in the vocational aspects of life. That Bob's vocational orientation was a strong factor in keeping him committed to chemical engineering long after he recognized its unsuitability to him is clear from what he said about it after he finally recognized this unsuitability. The passage quoted below is from the end of his junior year, following his discovery that he did not like the advanced course work in his major:

Spring, Junior Year. (And you thought about switching, I guess, but it wasn't practical?) "Well, financially it's not practical right now. I mean the degree from here will do me, will be, uh...let's face it, it means a dollar sign and a contract and all that. If you have something from this college, you got it. So I will go ahead and get my degree in chemical engineering. I can do that without too much of a problem."

The most damaging constraint of the vocational orientation is its curb upon the exploration of the curriculum. In his freshman year, Bob wished he could take only chemistry and mathematics and rid himself of "useless" general studies requirements:

Fall, Freshman Year. (Suppose you could have college any way you wanted it, what would be the kind of an ideal college you would want?) "...I wish there wasn't quite so much emphasis on the general studies...I would like to go to college to study what I want to prepare for, what I am going into. I'd be satisfied now if I had two chemistry classes and two math classes straight."

One would never guess from this, that Bob was to say later that these same general studies courses had been the most satisfying that he had taken in college!

The Puritan Child Self

Childhood-developed personality formations are still readily visible at the college age and often show up in student data. When no systematic effort is made to gather childhood information, as in the present study, the inferences about childhood personality must be made more indirectly from what the student reveals of his pre-college life. Bob spontaneously spoke of his school-age home values as "Puritanistic," and it is a reasonable inference that this describes the atmosphere of his childhood home life:

Spring, Sophomore Year. (Have your moral convictions undergone changes since coming to college?) "They are approximately the same -- haven't changed much. I don't question the values I came with. Actually, they have been strengthened by what goes on down here at college: fellow talking about their prowess - makes me ill in some respects. It seems like they get more evil out of it than good. The fellows talk about petting which gets a little violent. The next day they feel miserable -- went a little too far, felt guilty. I think I am different in my attitudes from my close friends. I have tended to keep my Puritanistic values -- like my folks, but maybe not quite as Puritanistic as theirs."

Much of Bob's course through college falls into place if one assumes that the general outcome of his childhood interaction with his parents was the development of a central self that included his own interpretation of what was important to his parents, and to his relationship with them. These home-bound personality formations would naturally have included Bob's childhood strategies for dealing with his own inferences about his parents' wishes. At least, as a college student, Bob acted as though there were a kind of a "home plan" that specified the priorities in life and the ways in which one must proceed in order to insure them against the temptations of the present. Several elements of this "plan" appear in Bob's college material. As intimated in the passage already quoted, one element that had to do with sex. Another shows up in Bob's attitude towards drinking. A third includes the idea that authority must not be criticized. A fourth, and most important theme, was that one must carry out the wishes of one's parents before one can respond to one's own preferences.

Drinking. Bob's early sophomore year interview shows the feeling he brought to college about drinking:

Fall, Sophomore Year. (How did the drinking go this summer?) "I haven't started yet."

(Not even an occasional beer?) "No. I just don't care for beer. The other men in the construction crew I worked with last summer always had a couple of cases, but I always took along my (LAUGHS) carton of soda pop."

(You have tasted liquor though?) "Oh yes, I just don't care for it. I don't like the flavor, the strength of it. I never liked beer. My folks had a little once in a while, and I have had plenty of opportunities to taste it, but I have never acquired the taste for it. They say you have to acquire a taste for it. It doesn't appeal to me enough to bother acquiring a taste."

(You think you will some day?) "I don't think so."

(How about whiskies and wines?) "The only kind of wine I could ever drink was blackberry wine - very sweet. I took a sip of my date's drink at a couple of parties this fall and I still haven't been able to like it."

Bob's spring sophomore year and fall junior year interviews read very much like the one reproduced above and showed unchanged attitudes toward drinking.

Girls. When Bob came to college, he left behind a girl with whom he had begun a dating relationship during the spring of his final year in high school. He did not consider that they were going steady, however, and the relationship broke up (under circumstances to be described later) in the middle of his sophomore year. His college dating pattern varied little over four years. The following spring junior year interview is typical:

(Let's take up your best girl friend.) "Oh, I dunno... there's two or three girls who I'm dating a little more frequently than the others but..."

(Can you single out one to whom you feel a little closer than the other two? What would you say your relationship was like now?) "Oh (LAUGHS) after five dates, it's rather hard to say. I enjoy her company and evidently she enjoys mine or she wouldn't have gone out with me that many times, but uh, uh..."

(Would you like this relationship to be closer, or to continue as it is?) "I think I'd like it to continue pretty much the same way it is now. Not uh...not get any thicker."

(You think she feels the same way?) "I suppose so, I don't know. I still kind of wonder if most of the girls here are looking for something serious all the time. I don't think I've really met any girls this year that I want to have much more than a good friendship with."

Bob was certainly following his father's advice which, as we will see, was to avoid getting involved, but, as we shall also see, he had his own reasons for keeping girls at a distance.

"Do What Must Be Done Before Following Your Own Wishes." If Bob's child self could have spoken, the foregoing words would represent its central construct as far as this can be inferred from the interview data. Here are some exchanges in which one can see an underlying conflict between Bob's own impulses and his feelings that he cannot do the things he would like until his parents' wishes are fulfilled:

Fall, Senior Year. (How did your father feel about it - dropping chemical engineering?) "I think he was slightly disappointed but he didn't try to talk me out of it. He just wanted me to look into all the angles first before I made any switch, which I did (LONG PAUSE). Well, at times I talked about (SHORT LAUGH) - in moments of fancy - going into the Peace Corps, and then coming back and finishing school. I always went along with him that I ought to get at least my B.S. before doing that."

Above all, this element of Bob's child self called for a college degree before "fooling around":

(How uncomfortable are you with this uncertainty, how does it affect you?) "Well, I don't know really, it doesn't scare me as much as some people, or some people think I ought to be. I think part of it is, in a way, I've at least fulfilled my major wish of my parents, i.e., that I get a degree graduate and get a degree in something before I start fooling around."

(Is that the way you kind of feel about it, that this is for them for their sake?) "Well, in some respects, because, if it wasn't for the fact...uh, it's kind of my own feeling too: to have the degree in my pocket so I have a little bit of security. But I sometimes have the feeling that if it wasn't for this fact, I might have dropped out of school, bummed around, maybe gone to Europe, or gotten a job for a year or so, just to see if I could find something outside that I could come back to. Sometimes I think that I'm...I just like the college life for the college life and not necessarily for what it means to my future. Just being here, and being able to study, and sit down and talk about things with other people. That's why I have enjoyed the outside courses I've taken so much: because I can bring in this, that and the other thing without really worrying about how this is going to fit in with what I'm going to be doing in the future (PAUSE) When I take a literature course, I like to sit down and wonder why..." (PAUSE)

Family Origins of the Child-Self Values. The origins of the proscription against drinking and sex in Bob's father relation are directly suggested in this interchange:

Fall, Sophomore Year. (What do you talk to your father about?) "I remember trying to get the car for some reason or other. That is usually the signal for us to talk about my attitude toward life. He generally asks me whether I've changed any of my attitudes. Most of the time he simply says he's given up making me do what he wants me to do. I'm on my own now, and what I do is my own business...Every once in a while (LAUGH) he wants me to reassure him that I'm not getting too serious with my girl. He just wonders how I feel about going around with guys who do a lot of drinking and smoking... The only thing he has ever said positively is that he had advised me not to get involved with any extreme relationships (with girls) or anything for a while."

Similarly for the prohibition against following one's own preferences before completing what Bob inferred that father wanted him to do:

Fall, Senior Year. "Oh, I think my Dad was a little perturbed at first about my switching from chemical engineering because he always thought that I ought to finish what I started and then fool around and play around with the other things."

Bob's phraseology is interesting. To him, actions motivated by his own interests, as distinguished from what his parents wished, represented "fooling around." While "fooling around" included the type of activity the words connote, such as having a beer with the boys, "fooling around" had the more general meaning of doing things that were interesting for their own sake, including "Just being here, and being able to study, and sit down and talk about things with other people...When I take a literature course I like to sit down and wonder why..." The dynamic of the Puritan Child Self operates in such a way that the liberal arts educator's invitation to browse among the best literature, to look at the curriculum just because it is interesting, is experienced by the student as a form of sin: "fooling around."

"Tightening-Up" Under Stress. It is consistent with Bob's central childhood value of doing just what was necessary that his strategy for accomplishing this under conditions where it became difficult to do so was to "tighten up." This ego mechanism is one of restricting oneself to the preservation of what is absolutely essential when the general situation becomes overwhelming. Only activities directly supporting the values that matter are permitted and these are intensified far beyond what is usual. In Bob's college situation, this meant severe restriction to a gruelling program of study:

Fall, Freshman Year. "As to how college compares to life before I came, I can't say too much because the difference is so great. The time I spent studying now is so much greater than the time I spent at home. I haven't kept an accurate record of the time I've put in studying, but it must be about five hours a night, plus five or six hours more during the day - altogether at least 11 or 12 hours a day."

(If competition is one of the things that worries you, how do you deal with the problem?) "...I'll have to dig in a little bit harder...study harder. I can't see any other way out of it."

Crystallization of the Plan to Become a Chemical Engineer

In his freshman-year interview, Bob did not say on what basis the decision to become a chemical engineer had been made other than his preferences for mathematics and sciences among his high school courses, but his senior-year interview was more revealing on the point. As it turns out, both Bob's own interpretation of the meaning of his high school vocational interest test scores and his counselor's advice, and of his father's preferences, all had a role in the decision:

Fall, Senior Year. (How do you account for this uncertainty?) (LAUGH) "I wish I really knew the answer, then perhaps I could figure out what I should do."

"I think part of it is due to the fact that I had stated when I was in high school that I wanted to be a chemical engineer - without ever really knowing...Because I liked chemistry and I liked math. I was talking with my college counselor in high school and he felt chemical engineering was my mold, and that was where I leaped."

(He said that to you?) "Well, aptitude tests showed that I was headed toward engineering of some type, and chemistry was a strong point and one that I liked; so I combined the two and for two years here I took essentially all chemistry, and so I enjoyed it - and then with the chemical engineering courses, I enjoyed the whole program until getting into the straight engineering courses."

(Sometimes it is the content of a program that is not congenial in terms of our interests, tastes, and sometimes we are not as successful in it, and then we don't like it. How was it with you?) "I think it was the content. I simply got no thrill at all out of electrical circuits, or electric magnetism, or other things I ran into in electrical engineering courses. It was tough, too, but I think a lot of it was tough because I didn't like the subject to begin with. In physics I had had an introduction to electricity and circuits and so on, and that just left me cold there. Then to go into these engineering courses; and not only on the electrical engineering side but on the statics and dynamics - I took home some of my roommates' books and read them, and looked at them and decided that it wasn't very interesting."

(And how did your folks feel about all these changes?) "Oh, I think my dad was a little perturbed at first about my switching from chemical engineering, because he always had the thought I ought to finish what I started, and then fool around and play with the other things. I suppose my mother felt about the same way, she didn't really voice a strong opinion either way."

(What do you think your dad would have wanted you to do?) "Well, basically, I know what he wants me to do, and that is finish my four years, get my B.S. degree, before I do anything such as join the Peace Corps, or anything like this... that is the main thing he worries about, just to be sure that I get through and have something as a backlog. But I think he would want me, or would like to have seen me, continue in chemical engineering just because that is a little more monetarily rewarding than chemistry as far as an occupation is concerned. If you have a B.S. in chemical engineering rather than in chemistry, the first year salary is so much higher. I don't intend to be a straight chemist or a straight chemical engineer either one. It doesn't make that much difference to me.

The College Curriculum as a Source of Constraint on the Exploratory Drive

The curriculum for any field of study tends to be organized like a pyramid, with the courses which most closely resemble the vocation the student plans to go into at the top. There are rational reasons for this in some cases, since a preparatory base may be needed before the student is able to do the work in courses that closely resemble his final vocational objective, and which often do not come until the upper class years - in some fields not until graduate work. An extreme case would be an entering freshman who thinks he wants to become a psycho-therapist. Today, he can follow several avenues to this objective, all involving post-graduate work. The longest avenue would be through psychiatry, which means that there would be four undergraduate years, then four years of medical school, followed by a year of hospital internship doing general medical work, and, finally, as a first-year resident, he may treat on his own his first psychiatric patient. Even if he chose a shorter route through clinical psychology or psychiatric social work, he could not hope to try his hand at treating a patient on his own short of six to seven years after he enrolled as a college freshman.

While such a pyramidal structure may be defensible from certain standpoints, it has a serious flaw in it for the student who must commit himself to a long program of study for an activity that he may or may not really care for when he finally has the chance to try it out; it cuts off the student's strong exploratory tendencies by means of which he would normally find out if he really wants what he plans to do.

Bob was overjoyed to find himself, finally, in the fall of his junior year, in actual contact with a real, live, honest-to-goodness chemical engineer who, for ten years, had been earning a living doing what Bob planned to do when he graduated:

Fall, Junior Year. "Chemical engineering is the most practical course that I'm taking right now because everything that we're doing is completely applicable in your actual job situation...our instructor has just come out of ten years of industrial work...so he tends to throw problems at us of a kind you might run into in industry...I think the main reason I enjoy it so much is the fact that I'm finally finding out what sort of things a chemical engineer is supposed to be doing, instead of rather intangible things..."

But when Bob finally had a chance to take upper-division chemical engineering courses, he found that he did not like them:

Spring, Junior Year. (Looking at the junior year overall, what's been most satisfying?) "Well, frankly, I'd say the academic side, overall, just the fact that I've been unable to get interested in any of my courses this year. It's really very disappointing to go through three years of college headed toward a degree in chemical engineering and finally get around to taking some concentrated chemical engineering courses and find you don't like them. It's been a matter of every terms saying, 'Well, maybe next term it'll change, maybe we'll get into some interesting stuff,' but, it uh..."

The Organization of the Work World as a Constraint on Exploration

It is not only the organization of the college curriculum that frustrates the student's efforts to learn what the field he thinks he wants is like, the job world outside seems to be even more determined to keep the student from exploring it until he has completed his studies and is prepared to join the company. Bob showed a very strong drive to find out about his proposed vacation. He was aware that he had decided for chemical engineering without any first-hand information about the field and felt a strong urge to test out his interest:

Fall, Sophomore Year. (What was the summer like?) "I went back to the construction crew - had a very enjoyable summer. I went back to it because it was the only job I was able to get. Last year I tried for a summer job in chemical engineering but you're not considered by companies with only one year of college... I'd like to get some experience in the chemical engineering field, find out what it's all about so I'll know why I want to remain in chemical engineering, if I do."

Spring, Junior Year. (What about this summer. What are your plans?) "Well, I'm not really sure yet what's going to happen...another thing that made me rather irritated with chemical engineering was that none of the companies who are hiring chemical engineers seem to want you as an undergraduate. They want you as soon as you've graduated. I mean, I can see their reasons because they're never sure whether you're coming back and they probably don't get their full measure out of you during the summer, but, then, again, it seems to me that a large part of your education as a chemical engineer would have to come from industry because they don't have as big a lab system here, or anything else. And yet I went to ten to twelve interviews during the year trying to get jobs. All of the companies offer a very limited number of positions. They interviewed at seven or eight different colleges and gave only two or three jobs. It just kind of disappointed me to see that companies weren't really that interested in your undergraduate education. All they wanted to do was grab you as soon as you were through with college. And some of the companies just told me frankly that: "We don't want you now, come back next year."

LIBERATING FORCES

A college is a rich organization of liberating forces - providing the student is open to them. Even if he is resistant, the college refuses to leave him in his constrained condition. The student, too, is full of young energies and vigorous exploratory drives that work against enclosure. This section will show how Bob's own great inner resistance to constraint and the liberating forces of the college environment coalesced to produce a breakout from the narrowly conceived plan for life that Bob brought to college.

Liberating Forces Within the Student

In the interaction between student and college, some of the forces that work against constraint seem to be ascribable more to the person himself, to the structure of personality that he brings with him, while other influences seem better described as emanating from the environment. The distinction is obviously a relative one, since both person and environment are always involved in every interaction, but, for preliminary analysis, there is a certain heuristic value to dividing the problem in this way.

Bob's Inner Resistance to Constraint

Youngsters do not, of course, simply accept the mandates they perceive as emanating from their parents. While Bob accepted his interpretation of their wishes for him on the one hand, his natural vigor drove him to explore and to reach out beyond the boundaries he had set for himself. Here are several rather direct suggestions about how much one part of Bob valued freedom from the constraint that a part of him was decreeing that he must accept:

Fall, Junior Year. (If you had all the money you wanted at the time that you graduate, what would you plan to do then?) "I'm quite sure I'd go on with my plans. Even if I had all the money, I wouldn't be capable of doing what I wanted to do without the education. I think it might make a difference in one respect: I might take a couple of years and maybe join the Peace Corps, or something like that -- while I'm still pretty young.

But I'm sure I'd finish college sometime."

A more indirect sign that Bob was chafing under his self-imposed restrictions is suggested by his dislike of a particular implication that he saw in the social sciences: their threat to the independence of the human spirit:

(What is the last course in the world you would consider taking?) "Well, that's kind of difficult to say because... I'd be willing to try just about any course, I think... although, I...well, I don't know, psychology is not particularly appealing to me now. It's really rather a biased view, but I don't like to think my behavior can be predicted by the running of rats. (LAUGHS) It seems to me that both sociology and psychology tend a little to try and put everything down: because of this, you do this; and it doesn't seem to leave too much room for independence, or much room for the overall picture."

The theme of freedom from restraint, which was to become an open concern in Bob's senior year, pervaded his thoughts about chemical engineering as well. Even at the end of his sophomore year it will be recalled that he had emphasized the travel aspects of his proposed career:

Spring, Sophomore Year. "The appeal of chemical engineering is the chance to travel (for petroleum engineering, which I might go into later)..."

Bob drew his first clear line against giving in wholly to constraint at the end of his freshman year when he refused to do what he saw that he would have to do if he was to maintain his high school position of being at the top academically:

Resistance to Becoming a Total Grind.

One of the interesting facts about Bob's freshman year is that, after a "C-" average fall quarter he tightened up his whole program and did "B+" work in the next two quarters. He seemed on the road to academic excellence in his major; then, in his sophomore year, he turned away from studies. Why did he not follow up this dramatic improvement in grades and go on to be outstanding, as he had always been in the past? The following interchange tells us: he saw that he could do it only by totally sealing himself in.

June, Senior Year. (Have you ever heard anything in the family about what you were like as a little boy?) "One thing

I could say was characteristic of me as a grade schooler, as well as through the rest of high school, was more or less being on top..."

(How has that affected you, having once been at the top and then at college being further down?) (VERY LONG PAUSE) "Well, I don't exactly know how to say it but, in a sense, I think that it's enabled me to broaden my experience. Because, if I was to try and drive enough to be number one all the time, well, I'd have to take an awfully narrow road in order to be number one in that specific case. I mean, it may sound like what I'm doing, is working for mediocrity in all things, but..."

(Was this a decision, do you think, on your part?) "I don't think so. Part of it came from pure observation my first few months here, when I realized that I was no longer number one, and that in order to be way up there I'd have to limit myself to a very narrow area, and, uh (PAUSE) well, I..."

(INTERRUPTS) (Well, if you had limited yourself, did you feel that you could be number one?) "Well, I think that if I'd done like I did my second term here - I didn't have a single date, stayed in my room, I think I went to see one movie during the term, and almost all the time I was in my room studying, just day-in and day-out. And I came out with a high grade point. I was getting "A's" in chemistry and uh (PAUSE)..."

(So you more or less made a decision then that's not for you?) "Right. I think towards the end of my spring term of my sophomore year, when I joined the House, I decided (PAUSE) (LAUGHS) there was, it sounds kind of corny, but I decided that there was more to life than studies."

Bob's resistance to being further "narrowed down" as the price of academic achievement and a systematic career preparation in chemical engineering is seen further in this interchange:

Fall, Senior Year. (How has education affected you as a person?) "We can go back to that old cliche -- the more one knows, the more you realize you don't. I think that is definitely true. The longer I am in college, the more people I talk with and the more I am exposed to classes of this type and that type, the more I realize that I don't have any conception of what there is to know.

When you try to decide what you want to be, and do, you realize that no matter what path you take it will have to be a fairly narrow one. And I think that has been one of my problems. I don't really want to narrow myself down that much -- in order to become really adept in anything."

Bob's refusal to "narrow down" reminds us how vigorous the exploratory drive is in young people: he was willing to sacrifice the security of high academic achievement to find out about the world. The fundamental instincts of youth support the educator's goal of liberation through discovery.

It is obvious that a highly selective college presents talented students with a problem: most can only maintain their accustomed position at the top by an extreme effort in which they shut out many of the opportunities for intellectual and personality development that a college offers. The problem would not have existed for Bob had he gone to his home state university where he could have continued on top and simultaneously explored.

Resistance to Constraining Entanglement with Girls

Although, as we will see, Bob changed his attitudes towards such home values as drinking, sex, and criticizing authority, he changed very little over four years in his avoidance of going steady. Judging from the testimony about to be presented, going steady was not just something his parents would have disapproved of. While girls represented sex and, in this sense, freedom from parental constraint on fun prior to fulfillment of obligations, the girl herself becomes a constraining influence once the relationship has developed to the point where the boy begins to orient his plans around her and around the implied constraint of marriage:

Spring, Senior Year: "I every now and then get an idea that, if I found somebody that I would enjoy living with the rest of my life...I (PAUSE) would be able to settle down and find my niche or whatever...I mean a lot of, several...people have told me that the best thing that could ever happen to me is for me to find...a steady girl friend and maybe I could see where I was going then..."

(They're concerned about your not settling down?) "I don't know whether they're really concerned about it. It's just that, I've talked to them and they suggested that that might be one way of doing it; find someone that I was interested in enough to draw some purposeful lines for her."

(Does that make sense to you?) "Oh, it makes some sense (LAUGHS) Maybe that's what kept me from ever deciding to get a permanent girl friend (LAUGHS) Then you have to make a few decisions!" (LAUGHS)

(What do you expect your life will be like ten years from now?) "If I had to bet, I would bet that within the next five or six years I'll decide that what I do want is a married life and whatever I'm doing at the time -- whether I'm going on in chemistry, or whether I finish chemical engineering, or whether I'm in medical research, or what -- well, I'll find some pretty permanent job, settle down and have a wife, I don't know...Not sure about kids (LAUGHS), things like that. You can only get so far, I guess, in giving up an ideal of some independence."

(You think that'll tie you down and...especially kids... tie you down more than you want to be now?) "Yes."

Bob's sophomore year break-up with his high school girl friend back home confirms the point:

Spring, Sophomore Year. (What sophomore year experience or activity was particularly unpleasant?) "The break-up with my girl friend back home. I received a cryptic letter from her and called her. She named conditions. She was ready to settle down and I wasn't. She found a guy who was. It came at mid-term and I got behind for a lot of the quarter. I felt depressed; it was hard to study. Finally went to the student health service about it and was referred to the college psychiatrist. I saw him several times -- a little bit helpful."

Bob's depression tells us that he gave up a relation that meant a great deal to him, and his willingness to give it up is a measure of how strong was his resistance to the constraints upon the boy that are inherent in a close relationship with all of its implications for marriage.

Bob's Drive to Explore the Curriculum

As every educator knows, the richness of the fare provided by the college curriculum may not even be perceived by the student. We saw how Bob's first response was to wish that he could get rid of all but the vocationally relevant courses ("I would like to go to college to study what I want to prepare for, what I am going into. I'd be satisfied now if I had two chemistry classes and two math classes straight"), but that was only a part of Bob speaking. The other part fought against the constraint of the technical curriculum and irrepressibly ventured to look over his roommates' shoulders at what they were reading, and kept up a steady pressure against constraint over the first three years of college, culminating, in the senior year, in a program consisting of music, art, and two languages. Here is the story of the interaction between the forces of freedom and constraint in curricular matters:

Fall, Freshman Year. (How do you feel about some of the fields outside of your major interest?) "Well, I've always been interested in music - my dad being very interested in it. I had eight years of music before college. I was a little disappointed at not being able to take any music this year - it takes time.

"I would like to take up some sort of language, if I have a chance to do so. I had two years of Spanish in high school and I enjoyed it very much. But I was never able to...it won't do me much good in chemistry.

"As a matter of fact, reading is one of my favorite hobbies. I like literature. I'd rather read than sleep. That's one thing that has disappointed me this year: I haven't had time to do any outside reading at all."

Although fall-term, sophomore-year, found a part of Bob jubilant over being done with required non-major courses (he had to take English and history his freshman year), another part of him was finding that math, his favorite high school subject, was often painful, and he found it "odd" that he was enjoying most the one non-chemistry, non-engineering course that happened to be a part of the required work in his major:

Fall, Sophomore Year. "I was glad to be back at college again...looking forward to some of the courses, finally getting rid of the required (humanities) courses...I'm taking organic chemistry, quantitative analysis (chemistry), a continuation of calculus, and economics...all of which are required for chemical engineering...the odd thing is I'm enjoying the economics most of all. I like the quantitative analysis. I have been having problems in organic chemistry. Math is fun when I have the time but it's a pain in the neck when I don't."

Bob also found himself looking with interest at his roommates' courses:

Fall, Sophomore Year. "...with these three roommates I've had a chance to see what several other courses look like...one of my roommates is taking archaeology and it's quite interesting ...two of my roommates are in the humanities. I think I'd really enjoy some of the reading they are doing...one is taking a political science course that parallels my economics course, which I am enjoying very much...I don't know. I have no room in my schedule for any of these courses..."

Bob not only found himself looking at his roommates' courses with envy. When he tried to work on his all-science-and mathematics program, his feelings showed some rather plain evidence that they did not fully agree with his statement that he was glad to be "finally getting rid of the required courses" (in the humanities):

Fall, Sophomore Year. "...even the times when I'm studying, I've been having trouble concentrating lately...it's harder to concentrate now than it was at the beginning of the year...sometimes I'm not thinking about anything at all. I'm just sitting there with a blank mind."

By spring of his sophomore year, at the very time when he had, in his formal statements as to his major, returned to a firm stand on chemical engineering ("I have decided that chemical engineering is the right field."), Bob was showing a reaction to the curriculum that hardly sounded like a future chemist or chemical engineer:

Spring, Sophomore Year. (What do you find interesting and exciting this quarter?) "Well, probably the philosophy, which I can see now is quite tied in with the modern-day world...it is something that I have never gone into before. My high school background in history was very poor and it is interesting to see what people are talking about...my history professor is very good. He is interesting all the time...at the end of the discussion period, he will answer questions...this is quite interesting...since it is a small class, he works with us somewhat individually, asks us how to do this; we tell him what we think...the psychology professor knows his stuff. The physics professor has some very good demonstrations, but the instruction is usually very boring."

By the fall of Bob's junior year, the current feelings about his major and career were thoroughly mixed. He was still majoring in chemical engineering, and even planning to go on for a master's degree in chemical engineering, but his emotional preferences, as distinguished from his formal career plans, were showing through in the form of interest in courses that were not a part of his major, and very mixed responses to his technical courses:

Fall, Junior Year. (What courses are you taking?) "One in physical chemistry, one in chemical engineering, one in physics and one in sociology."

(And why did you choose sociology?) "Well, one of my roommates from last year had taken it and enjoyed it. I was interested in taking one of the behavioral science courses, and since both my roommates put sociology over psychology, I decided that it would be the better course...I'm enjoying it. I don't like the way the course is taught; the professor lectures and we have a reading list and neither one are correlated to the other very much; he admits it himself...we have a term paper in it and I think I'm going to learn more from working on the term paper than I would get from the rest of the course. The paper is about relating social stratification to the racial problem in the U.S. and of course it's a rather well-timed subject -- both (from the standpoint of) my roommates and the current happenings in Mississippi."

(And what is the professor like?) "He's a very interesting lecturer. He's full of examples, he can give an illustration for just about anything you'd want to know. He jumps around a little bit in his subject matter, but that's one of the classes I have no trouble staying awake in...the only thing I don't like about it is that the lecture doesn't seem too correlated to the reading list."

(If you had more time, what additional courses would you be wanting to take?) "Oh, it might have been political science, I guess. I enjoy discussing current events enough so that it would be kind of nice to have a little bit of background."

Bob's underlying feelings came out in his responses to several questions about what he would have done if circumstances allowed him more freedom:

Fall, Junior Year. (If you were required to take only one-half of your courses, but were given full credit for those so that you could graduate with half the number of courses that were now required, what would you do with the half-time that became freed?) "I would probably take just a lot of general courses such as the sociology I'm taking now, and political science, or a couple of religion courses...philosophy...just about anything to make me the well-rounded graduate."

The foregoing interview excerpts clearly show Bob's strong drive to look into matters outside of his own field, but, as was suggested earlier, the strength and persistence of this interest was ignored by Bob. He could see that he was interested but could not see the implications of his interest for his decision about a career. Chemical engineering was an obligation; these other courses were just "fun," "fooling around," something that must be postponed until what was obligatory had been carried out.

Social Drives

Bob not only refused to stay confined to his technical curriculum, he found himself developing a growing interest in people and social life:

Fall, Sophomore Year. (What is different about the sophomore year?) "I'd say the main difference is I'm living a lot more free a life now. I've been doing a lot more socially, been talking, just sitting around and talking a lot more than I did before. I think it's definitely more fun."

"All of us (four roommates) are finding it pretty difficult to study, but one of my roommates has been doing what I would call 'exorbitant non-studying.' He has had as many as eight dates in eight days...last year he never went below an "A-" average and he was not sociable at all. But he got a car and that seemed to turn him on. It's somewhat baffling to me...the car has something to do with it. The car had something to do with me as well because his having a car enables me to go on more dates. He generally looks for someone to go with him and I'm the only one of us roommates who dates much..."

"People told me all last year that I ought to take more part - just getting to know people, that's a big part of life and I'm beginning to agree with them that it is a lot of fun to be out with other people and just relax."

Bob was doing more and more "fooling around" on the social front. His interest kept leading him into developmental and highly educational experiences despite his childhood-based perception of his father as disapproving of such exploration.

Liberating Forces in the College Environment

The student's primary emotional response to the college is made toward other students rather than toward the faculty or the curriculum, and most of the developmental effects on personality, and, apparently, much more of the educational influences than anyone has suspected, comes from the student surround. In Bob's case, this influence seemed to be of two kinds: the effects of contacts with a great variety of personalities and the special power of close friendships.

Student Diversity as a Liberating Influence

Any college is likely to be made up of more diverse selection of personalities than most students have encountered before, a most important educational fact in view of their strong impact on development. The heterogeneity of the students at the college Bob attended was probably particularly great, since most selective private institutions consciously seek such diversity of background, experience, talent and personality in their admissions policies. Bob found diversity in every aspect of his college environment:

In the College at Large: (Fall, Senior Year) (Can you give me a picture of the different kinds of people one finds at this college?) "Just about anybody: from beatniks to the very conservative sophisticates. I'd say, first, that most students here are on the conservative side. They are neither raving liberals, nor solid John Birchers - a little to the right of the middle of the road. There does seem to be a rather strong element of these pretty wild (PAUSE) - you might call them immoral by social society standards of immorality - people who just don't care about what others think."

(You mean sexually? Or in other ways?) "Oh, sexually, and in the lack of respect shown to their elders, to other people -- they simply don't care. They are not too large a group but there are quite a few.

"Then there are others who are completely on the other side, who go through the whole four years of college on a very reserved basis and have contact with only a few people. The first couple of years it seemed to me I met many non-intellectuals, just here because the college gives them a degree and really not caring about their education much. I think getting into the House has gotten away from that side of it. In my freshman year I knew fellows who were here just for a good time, their folks had money and they didn't have to worry about that. I think that attitude still exists, but I don't see so much of it anymore."

Among his friends: (Spring, Junior Year) (How would you say your present friends are similar to you?) "I'd say the only similarities are the fact that we are all in the same House. We're about as diverse a group of guys to be close friends as is possible. My friends differ from me in that we are in different courses of study; have different ideas towards girls (one of my closest friends dates considerably and the other doesn't date at all); towards drinking (one of the fellows in my circle doesn't believe in drinking, the others do). About the only similarity among the four of us who are closest is that none of us smoke, and three of us are ex-track men."

(How many of your present friends have a religious background different from your own?) "Two of them are Jewish. Two or three Catholics I guess...I think there's a Lutheran and an Episcopalian."

(Do any have a different racial or national background?) "One roommate is a Negro, and one friend is a Costa Rican."

(About how many of your present friends' parents are in income groups different from your own parents?) "...there are only a few that are in the same category, otherwise I think it runs the gamut, Fred's parents, for instance, are in a quite low income group, while Alfred's father is pretty high up."

In his House: (Spring, Junior Year) (If someone were to ask you 'What kind of students are there in your house?' what would you say?) "There are those who are the grinders and I suppose you'd call them the 'educational machines,' who just simply sit there and work their slide rules all the time and try to get the best grades, the grade-grubber. There are those who are quite liberal, always worrying about other people, worrying about civil rights, worrying about what's going on in poverty, and so on -- working outside of the House in various areas of general welfare. There are those in the House who, sometimes I would say, are just there to have fun. They don't work that hard at grades and they don't work that hard at outside activities; they spend their time going to movies or going out, or just kind of enjoying life. There are the executive types, the future business men, guys who are already getting businesses going for themselves. They are pretty serious about their studies but don't care about their grades. They're trying to get what they can out of college to benefit them in what they're already setting up for, or what they intend to set up when they get out. Then there are the athletes, fellows who are pretty much devoted to their running; school seems to be somewhat secondary."

Among his Roommates: (Fall, Junior Year) (So you have three roommates? And how's that working out?) "Oh, there are a few conflicts, but it's working out all right. One of the fellows we have is a Turk from Nigeria and his ideas are somewhat divergent from ours; he's a segregationist and, in some respects, a warmonger (LAUGHS) and, being a member of the minority of the population in Nigeria, he's also an imperialist; so it makes a rather interesting situation for arguments."

(How is he as a person?) "He's immature. He's only 18 years old, and he has lots of things to learn. He's pretty obstinate and quite dogmatic. He will not change his views, and will rarely really listen to any one else's opinions. It's interesting, because my older roommates and I have a mutual friend who is a Negro. The Turk from Nigeria spends quite a bit of time in the room and it sets up some pretty good arguments when we get this older roommate and the Negro, and the Nigerian into arguments. I think basically it's a good situation because it helps you to make your own convictions concrete."

Among his Dates: (Spring, Junior Year) "I've dated, during the fall quarter, a Catholic, a Jewish girl, and an oriental girl...a history major, a music major, a writer, and a math major."

An Example of the Influence of Student Diversity.

Bob gave a telling account of one of the effects of student diversity upon his own development:

Fall, Junior Year. (Aside from your academic work, what has been happening in your life during the past two years that has been of particular importance to you?) "The most important has been due to a combination of influences from both academic and campus life, and that is the formation of ideas of my own. When I came out of high school I was just a blob of putty being ready to be molded; I had no real opinions about anything: political, moral, or anything else. I know that I've developed educational, occupational, and moral goals and ideas. One example would be this racial problem that's been so predominant on campus the last year or so. My mother's father, for instance, was a Southerner and was very definitely a segregationist and there were members of her family who are very opinionated about racial problems. This last summer we had quite a discussion. One of mother's brothers is a segregationist, another sister doesn't want to admit she is; then there were several others who are complete integrationists so...the point is (that here in college) I was able to have a definite opinion on the matter; not just sit there and nod at the obvious statements of one and then nod at the obvious statements of another."

(How did you come to have particular ideas about political, moral and other matters?) "I think it's mainly been through discussions with my fellow students. For instance, our House is about as diverse a group as you can find and there are constantly arguments being waged about this and that and the other thing. It's difficult not to have a stand on something when you can hear the ideas of this person being presented and you know you don't agree with them. These sort of discussions make you want to find out something about the case. Two or three of the books this summer I read resulted from such bull sessions. I read The Organization Man, for instance, mainly because of a discussion we got into."

(So there is a difference of opinion in your family too. You said there were segregationists and integrationists...and you had heard these discussions and yet that didn't lead up to your becoming firm about your own views. Was there something different about hearing it here at college as compared to back home?) "Yes, I think so, because here at college the thing seems a little bit closer to me. Back home I never really had any - well, I had never even met a Negro before I came here for instance. The people that I talked to and had discussions with at home were generally involved within the community, they were either lawyers or they were teachers. There wasn't too much else. Down here I was exposed to sons of steel workers and sons of bankers and so on. It's an association with the world."

Bob's account is of theoretical interest in showing the difference between mere exposure to environmental differences as compared to personal involvement with these differences. He had heard segregation versus integration discussions at home, but he experienced what he heard as just another, personally remote, aspect of the adult world. The same issues introduced into a context of personal relationships of strong emotional concern to him, and in discussions where he could participate as an equal rather than as a child who expects to simply "nod agreement" with the wisdom of adults, had quite a salutary developmental effect. One can hardly remain emotionally disengaged when one finds that the category "Negro" and "friend" apply to the same person, and another emotional relationship, "roommate," coincides with "anti-Negro"; and all three of these usually carefully separated categories of meaning are brought together in hot debate in which one is inescapably involved.

Deep Friendships as a Developmental Influence

Some friends are special. And when they are not only very close, but are also very different from oneself, they can exercise a powerful influence upon the course of a young person's development. Fred did:

Spring, Junior Year. (Would you describe your two closest friends, preferably one male and one female, the one in each category that you would consider your best friend. You want to start with the male?) "Well, that would be Fred, I guess. It's hard to draw the line between Fred and Ralph because they're both good friends. I guess Fred would be my closest."

"Physically Fred is shorter than I am...fairly good physical condition. His dates are usually made on the basis of his intelligence, not his looks; he's not really too good-looking, but he gets along. He's quite impressive. Partly this is in the man, partly because he always has something to say, and no matter what subject you're talking about, be it anything from sports to philosophy, he has something to say, and he generally has something to back up what he says. It's kind of like talking to a term paper, because if you ask him to footnote it, he'll footnote it."

(He's quite a scholar?) "Yes, his grades are pretty close to a 'B.' I think they're a little bit above that, but the thing that amazes me is that he doesn't get 'A's' on all his papers. Well, it doesn't really amaze me that much because he doesn't spend the time on it that some of the other fellows do, but most of the time in discussions or when he is really writing, I find him hard to surpass anyone. My other roommate, Alfred, has close to an 'A' average and he takes about the same courses the Fred does, but he spends all of his time working on these things. If he has a thirty-page paper to write, he'll spend three or four weeks on it, while Fred will just sit down and write it in a week and a half or something like that. Fred will probably read more books. Alfred will read fewer books and perhaps use more out of the books than Fred. Fred uses a lot out of his head."

(When did you meet Fred?) "My freshman year. He was the first person I really knew well here. We came in on the same day and because our names sound alike, another student said, 'Hey, there's a track man by the same name on the second floor.' So we got together that way."

(What would you say your relationship is like now? What are your roles in this relationship?) "I'd say that I hold more respect for Fred than he does for me. But I don't really hold it against him because I know he doesn't think too much of engineers and since I'm not so sure I'm an engineer, well (LAUGHS)...I'm not by any means as lucid as he is and, therefore, in most discussions, he carries the ball most of the time."

(What are you getting out of this relationship. What is it there that's satisfying?) "I'd say that Fred has been responsible for a good deal of my education, otherwise I'd simply have to have been a slide-rule manipulator for the three years that I've been here. He makes you think. He'll come out with some answer which is so cynical or so...well, if I come up with some statement, like 'I want to be a tutor in the educational program for deprived children,' Fred says 'What for?' Even though he is also a tutor there, he'll ask me exactly why; he'll give me a lot of reasons why I shouldn't be. He just makes you look at every side of every question and think about it, and not in terms of just simple equations. If I have any philosophy at all, I know most of it has been dredged up by Fred."

(How are your backgrounds different?) "Fred comes from a less well-to-do family. His father is a mechanic. Fred went to a large high school in a big city and ran around with a pretty wild group of fellows, most of whom were quite intelligent. He started tackling philosophical problems in high school while I barely knew what philosophy was."

(What do you see as his outstanding positive and negative traits?) "Positively, I'd say just the effect he has on other people. I've known people who almost despise Fred, but still respect him because he'll make anybody think about something, and he's so completely capable of being coherent all the time that you never have any doubt about what he's saying; usually you don't even doubt that what he's saying is true. That may also be somewhat negative in the sense that some of the guys, like perhaps myself, sometimes take everything that he says for granted, simply because we have no reason to believe otherwise, or he presents it in such a good manner that it's difficult to believe otherwise."

(What kind of difficulties do you have with each other?) "Well, my main difficulty with him is trying to communicate. I'm not nearly on his level of communication most of the time. The places where we are in communication with each other are generally on very everyday things, such as our common interest in track and our drinking together."

(Do you ever have any arguments with each other?) "Oh, now and then. Not any really strong arguments except...I, dunno, it usually ends up with Ralph and me against Fred and we hold our own fairly well."

(What do you think you do for him?) "I think that what I do for him is, perhaps, holding Fred down to the worldly level every now and then, and specifically, quite often I keep him from drinking too much. Sometimes he'll get carried away on some idea of his, and it takes the practicality of an engineer to pull him back down. He gets pretty wound up on something like getting an idea of quitting school, or something like that, and, after arguing with me he sees the practical side of the situation."

(Have there been any changes in your relationship over a time?) "I'd say it's much closer now and much less superficial. In our freshman year most of our relationship was based on our participation in track. Since we've roomed together for over a year-and-a-half now, well it's changed..."

In his senior-year interview, Bob repeated most of the foregoing statements about Fred. Excerpts that add to the picture follow:

"...Fred is a history major, he is outgoing, very frank, single...he's not one to waste words. He is very intelligent. He is one of the few fellows who ever takes on a professor - in one case it was a visiting professor from an Eastern university, and Fred came out fairly well. After all, he had just a normal college background, and takes on a professional professor in an argument of some sort. The argument can become quite involved and he has no trouble at all. This guy has an amazing backlog of information. Apparently he remembers practically everything he reads. Often he will irritate someone, but then they will get to thinking about it and they realize that what he said was really a point in question, and they should really think about it. He is not one to fool around with guys who are saying words just to be saying words. In other words, if you don't have something to say, he doesn't really care to fool around with you."

"I find Fred to be very personable, very humorous. Some people don't like him because he is very frank and very sarcastic. There have been times when I felt he carried it a little bit too far, but most of the time I enjoy this kind of thing. Sarcasm is good; it may sting a little bit, but it does point out an awful lot of things about you. He probably has one of the sharpest wits of any one I have ever known. He has a comeback for just about anything that he thinks is worth answering."

(What would you say about his general beliefs and values) "It's hard to say because, in a lot of respects, he is a humanist. He doesn't always show it because of his sarcasm and cynicism, but I think his basic belief in humanity is that humanity is good. On the moral side, he drinks, doesn't smoke, not because he thinks smoking is immoral but because he doesn't like to smoke. Girl-wise, sex-wise, I think he can take it or leave it -- just one of those things. He doesn't really seem to have too much respect for other persons unless the other person shows that he is capable of meriting respect, unless he has a sharp enough wit or uses what he has to the best."

(You once said that if it weren't for him you might have ended up being a slide rule) (LAUGHS) "Yes, I think that is probably pretty true. In order to ever sit down and argue with him on any point, I knew that I had to have a lot better background than just the science and math that I was going through...I used to read scientific journals, math journals and things like this instead of reading Time, or Harper's and some of the broad magazines. I just didn't realize, until I met him, exactly how narrow my past was."

(Is your relationship with him a mutual one. Is there a kind of equality about it, or is he more dominating, controlling?) "Well, I don't know, frankly, I feel inferior to him, mainly because of the knowledge that he does have and the way he can use it. And I think if he does have any feeling of superiority, well, he merits it. (LAUGHS) It is pretty much of a reciprocal friendship."

Aside from the obvious educational and developmental influences Fred had upon Bob, it is of interest to note his personal qualities, since Bob's attraction to him must have been partly a response to these characteristics, and his responsiveness to Fred tell us something in turn about Bob. Fred's general superiority and dominance in the relation is clear, and it seems a reasonable inference that, for Bob, he had a "father" quality in this respect. The case material is too thin to document the point, but the relationship looks like one of those instances of a "transference friendship" in which the main attraction rests upon the other person's capacity to reintegrate a childhood relationship to a significant figure in his early life.

But Fred had some "unlike father" qualities: as a high school student he had been "wild," and in college he drank heavily. Could Bob's own suppressed tendencies in these directions, his strongly controlled rebelliousness, have found a resonant sympathy in his being drawn to such a friend? He might similarly have been drawn to Fred's criticalness. As we will see later, Bob felt particularly hesitant to criticize authority as a freshman, and, as a senior, felt that he had changed most in being able to express criticism. A friend who can take on a professor is not only a person to learn from in this respect, the trait may also have been one basis for Fred's strong appeal in the first place.

Summer Developmental Influences

Summer jobs and their effects are a part of the personality development scene in the college years. Bob worked on a construction crew for three summers, the second two of which he was foreman of the crew. It proved to be a significant formative experience in Bob's life:

Fall, Sophomore Year. (How did you go about getting the job you had last summer?) "I worked there the previous summer, so it was just a matter of saying that I wanted to come back. Actually, this summer I had quite a different job than the previous summer. This past summer I was promoted to foreman of the crew..."

(How was it, being in charge?) "Well, at the beginning of the summer, it gave me an odd feeling because there were seven of us on the crew and I was the youngest of them by at least a year. Some of them even had more experience than I. Needless to say, I was a little bit leery at first about giving orders, but by the end of the summer, it didn't bother me."

(How did it happen that you were put in charge?) "I'm not sure. One fellow...had worked on the crew for two years and I would have expected that he would be in charge, but he wasn't...I think...he had been in trouble with the boss two years ago."

(How did you get used to being in charge?) "I just decided that we had so much to do and it had to be done. So I figured that since I'm in charge, I've got to give the orders...I almost always asked the fellows their advice on what to do...and then, after I found out exactly what the job entailed, it wasn't hard to decide what to do and what not to do."

Bob's second summer as crew chief (just before his junior year) provided him with several tests of his political and leadership skill, from which he must have learned much. Two conflicts occurred over the summer, one with his superior over the enforcement of rules and a second with a crewman who wanted to shirk on the job:

Fall, Junior Year. "The only other conflict was between myself and my bosses. We had a switch-over in superintendents during the summer, and, for some reason or other, I don't know whether it was pressure from the new superintendant but my immediate boss started pulling out a lot of rules and regulations."

(What did you do?) "Well, in the first place, I know my boss pretty well and I'm quite sure that the only reason he started pulling all these rules out was because he was under pressure. And so I did...(LAUGHS) in some respect I didn't follow orders completely because I knew if I did it would only grate on the rest of the crew. For instance, just an example of one of the rules, we were working on construction toward the last few weeks of the summer and one of these rules that came up was that you had to travel on your own time. That is, if you weren't changing job sites you had to travel back and forth to the job on your own time. Well, the place we were working involved three hours of driving which, to say the least, cuts into your day a considerable amount if you have to put this in on your own time. This was something that had never been pressed before. Similar situations had arisen before and we'd always taken half our own time and half theirs. Well, this new superintendant had other ideas about it. So the way we got around it, which was strictly illegal, was that we started working earlier in the morning, so that we could, if not travel on company time, we could at least get home at a decent hour. And that's the way I tried to get around most of the problem, doing a little bit of, you might say, extra-legal activity. But it tended to keep the fellows happier on the crew, so...I felt that if we followed the rules exactly, the way that the bosses had said so, well...the quality and quantity of the work would both have gone down."

(And this crewman who didn't want to work. How did you handle that?) "Well, fortunately he left before the summer was over. The main thing was that I did have to become pretty dominating over him towards the end, because he started griping about every little thing that went wrong, and he was causing dissension among the crew. Actually, the whole matter kind of alleviated itself because he not only alienated himself from me, but he got the other crew members rather irritated at him too. There were a few times when I had to use, well (LAUGHS) you might call it disciplinary action, but it just amounted to insisting that he do something instead of us...or insisting that he be quiet about something."

As we shall see, Bob entered into leadership roles within his House following the above-described summer; quite possibly the experience as construction crew foreman laid the groundwork for the junior-year developments on campus. The technique he developed of handling older and more experienced crew members through "consultation" is a valuable political technique, possibly based on methods that he had previously used in dealing with father. Bob's talent for political compromise between conflicting parties is already evident in the above episodes in both of which he managed to look after the best interests of the crew while placating the authorities in the one instance and handling the difficult crew member in such a way as to keep the support of the crew in the other.

Organizational Roles as Developmental Influences.

An important form of the developmental influence is provided through student organizations which serve as major developmental pathways in the college experience of a good many students. Their pathway function lies in their organizational structure, in the form of offices that a student can hold. Carrying out the obligations of these roles serves to bring the student into activities that he would otherwise not engage in, and which may strongly affect his personality and intellectual development. This happened in Bob's case:

Spring, Sophomore Year: (What sophomore-year experience was particularly pleasant?) "Just the fact that I participated in the House, It brought a lot of new things into my life. I was able to see more of the world instead of just the dormitory cubicle I was in my freshman year. I saw more of the university; more controversial types of faculty, administration, and students."

"I take a good part in fraternity activities. As Faculty Guest Chairman, I arrange for faculty guests to come over for informal discussions...and have taken part in the rush program. I work out the faculty list program, issue an invitation to the professor and try to work out some dates when he can come over. Then when he comes it is my job to introduce him to the club. A history professor was over last week and talked about the department. Everybody was interested in that. Another professor discussed university policy - he is connected with the Dean's office. One of the guests we had was from Harvard and we discussed what went on at other campuses."

Spring, Junior Year. (What about non-academic life?) "Well, I quit track so I'm spending more time on House activities, House social life. I was the athletic chairman for the House during the fall and rush chairman during the last half of this year...I'm president of the House next fall..."

(What would you say is a junior year experience which has been particularly satisfying?) "My work...as rush chairman. In some respects it's a leadership capacity. You've got to get out and work on an awful lot, take care of the freshmen, find the right ones and get them over. It's a position of power in some respects because you have a big part of the say over who the members are for next year. What was most pleasing was that, even though the other Houses had their problems in getting a good-sized pledge this year, well, we were quite successful... we actually got more pledges than we needed."

By his senior year, Bob was handling his presidential office with the relaxed ease of an experienced politician. The job even seemed a little tame:

Fall, Senior Year. (Are there any new things you are doing this year?) "Oh, (PAUSE, SHORT LAUGH) outside of the classroom mainly I have been involved in being an officer of the House. This includes the Inter-House Council which is a little different. But so far not too much different."

(What's it like being President?) "Not too much different than being any officer in the House. Except I get served first at dinner. (LAUGHS) It's good in that I have somewhat of a talent for organizations and so I am in a position now where I can get things going, but it's not too much different than being, for instance, rush chairman in the Spring. There you are doing the same kind of thing...trying to organize a group to take care of this, and so on."

(What are you getting out of it?) "Oh, seeing a few things accomplished that probably wouldn't be accomplished if I hadn't been there, such as revising the Constitution. The House has needed a revised constitution for years, and nobody ever got around to it, so I got a Committee going on that. There's a group that is working on some speeches and guests in residence in one of the dormitories, partially out of our House and partially out of the entire ICC. It was initiated by our House. Oh, I don't know...I got committees on this, that, and the other thing. A couple of weeks ago, a lady from town called me up about the United Fund drive, I took care of that. It didn't involve too much work, and didn't have to have a big committee, so I took care of that. I linked up with a girl's group and drove for the United Fund. But usually it is a matter of delegating a little authority here and there."

The Faculty Influence

And what of the faculty in whom we vest such great powers to stir young minds and to free them? Bob's response to the faculty was mostly in such terms as:

The Instructor's Skill in Making his Presentations Understandable:

Fall, Freshman Year. (And what are your teachers like?) "I find them all very interesting. Our English teacher is a young lady...it must be her first year of teaching. But she's all right for the course. My chem instructor is tops, along with the math instructor. I don't think much of the graduate student who is my math discussion leader...he acts entirely bored with the whole thing. I can see why; it's elementary to him, but to me... having had no calculus in high school, I'm behind. He brings in a lot of things which we haven't had...shows them to us and says 'Well, you'll get to them later...'

"My math teacher goes at a real rapid rate, but she presents it in a way which we can completely understand...you don't have any trouble at all getting what you should out of the lesson...she's a very good instructress."

Fall, Junior Year. (What is the physics teacher like?) "He's a good presenter of the materials. He does a lot of preparation for his lectures in that he always has experiments or illustrations...he tries to explain everything in terms which you can understand...illustrates them well enough that you don't have any trouble understanding...He's not one of these fellows, as the last two physics profs that I had were, who stands up there and says 'It is obvious that this follows this' -- but it is not always obvious."

Their Entertainment Value: "...he's always going halfway through the problem and all of a sudden he'll see he forgot something...and he'll start tearing his hair apart (LAUGHS)... he's kind of humorous."

Whether They were "boring": "Probably the first quarter physics prof was about as boring as they come. He simply took his lectures almost exactly from the book so it was the same material as was covered in the book. He didn't add many illustrations or experiments and, when he tried, he generally failed (LAUGHS)...Just a dry lecturer and he was one of those like I mentioned before, one of those types who just sits there and starts writing these relations on the blackboard, saying it's obvious that this follows this and goes rattling through his lectures, rarely with any time out for questions or anything like that."

The Relevance of Their Presentation to His Proposed Future Career: (Can you think of an exciting teacher and tell me what he was like?) (PAUSE) "I'd say probably my chem prof, wild as he is, he's probably the most exciting. But I think the main reason that he's exciting is because he can bring things from industry right into the classroom and really arouse the interest of the class..."

"This instructor has just come out of ten years of industrial work...so he tends to throw these problems at us which would be something you might run into in industry...I think that is about the main reason I enjoy it so much..."

Perhaps Bob's perception of the faculty was uncharacteristic but, increasingly, social scientists who have been looking into faculty influence are beginning to feel that Bob's attitude represents the role of the faculty in student development quite well. Bob knew little about the faculty and did not care to change the relation:

(How much contact have you had with your college teachers?) "Well, more contact with those in chemical engineering and chemistry. Probably not more than going in and seeing them personally a couple of times a term. Our chemical engineering class at present has only twenty students in it, so you become fairly familiar with your teachers just through class discussion."

(Did you see any of the instructors in other fields outside of sciences?) "History was similar in that you had just small classes and I did see my history prof a couple of times... each term."

(Would you like to have more contact with your teachers, or less?) "Oh, I think the more the better. Now and then I feel that I don't see them quite often enough, but if I really felt that way, I'd probably go and see them more often."

THE BREAK-OUT

The balance between liberating and constraining forces was sharply in the direction of constraint during Bob's first year and there was little change in the second. As Bob confirms, the balance of forces shifted sharply in his junior year:

Fall, Senior Year. (Do you feel that during your college years thus far you have changed as a person? Almost not at all, moderately, or a great deal?) "I'd say a great deal. The attrition started in my freshman year and the main change was the last couple of years."

The changes in Bob's personality were widespread, as will be seen, but many of them had a common theme: moving away from the parent-associated values that he had reasserted so vigorously in his first response to the cultural and identity shocks that he experienced soon after coming to college.

Changed Attitude Toward Drinking

Bob's junior year was decisive. A sensitive indication is the difference between the fall interview of his junior year and the June 1st interview of the same year. In the fall interview, cited earlier, Bob still did not drink at all. By June, he had changed:

(How much drinking do you do these days?) "Considerably more than I did my first two years -- about once a week I will go out and just have one or two beers...and talk. Sometimes it's a little more extensive: maybe four or five."

Changed Attitude Toward Sexual Relations Before Marriage:

Although Bob graduated without having had sexual relations, his verbal attitudes, at least, had definitely been modified. Again it was the end of the junior-year interview that showed the change:

(How intimate are you now, physically, with the girls?) "Oh, nothing beyond a little make-out."

(Nothing beyond a little necking? Are you still a virgin?) "Yes."

(What are your thoughts about pre-marital relations?) "It isn't really of very great importance to me. I have a good friend at home, for instance, who wouldn't think of premarital relations, but I think it's completely up to the people involved."

(But for yourself?) "I don't know. If the situation arises that I have my choice, well, I'll make it, but I don't know which way it would be. There's nothing that...I still have in the back of my mind the fact that I know my folks would not condone it, but then I've changed, changed so much, so many of my other ideas from what my folks have advocated, that if I ever made that decision, it wouldn't bother me that much...like I say, it depends completely on the people involved. I know fellows in the House who've had premarital relations and they see nothing wrong in it as long as neither person is hurt and that kind of thing, but I feel if you have real doubts about whether it's right or wrong, well, it's probably wrong in your mind, because you've got those doubts there. I have never been faced with the situation, so I don't know. If I come to the situation and I have some more doubts well I...."

Bob's fall interview as a senior confirms the change:

(Have you been aware of any changes in being like or different from either parent since you have been in college?) "Oh, I think if anything I was more conservative when I came into college than I am now, and am moving away from my folks in that respect. Let's...well, sexual morality, for instance. I mean when I came out of high school I had the same attitude my folks have that premarital sex is taboo. Now, personally, I don't really have anything against it; I have not taken part in premarital sex but I don't condemn someone because he does. I think I probably would have (condemned them) if I were a freshman."

(But you are still living by that same code) "More or less - I, let's say I have never been faced with a situation that I had to test it, or if I have been faced with it, it hasn't been strong enough."

(If there were a girl you were really interested in sleeping with....) "It's possible, it's possible, it's something I wouldn't rule out. But I think it's somewhat this way in a lot of respects, I am less quick to condemn or dislike because of the way they act than my father or my mother would be."

Changed Attitudes Towards Grades

As we saw, Bob's freshman-year reaction to suddenly finding himself a "C-minus" student (instead of an "A" student he had been) was to "tighten up" and study much harder. As a matter of fact, this hard work paid off: he made better than a "B" average the second and third quarters of his freshman year -- the best he was ever to achieve in college. By his junior year, grades had a different emotional importance to Bob:

(I want to ask you whether your feelings about grades have undergone any changes in college.) "I'm less worried about grades now than I was before. These past two years it's been the constant worrying about keeping the grades up so I could get my scholarship back. But right now the pressure is completely gone on that because I have enough money at home and even if I don't win my scholarship back for next year I could make it through, and I've got my scholarship for this year so... in other words, there's no question about my finishing college. I think that's been the main consideration before. I'm mainly just worried now about how much I'm actually getting out of the courses rather than whether or not I'm making "A's" and "B's".

By the end of his senior year, Bob's only motivation for study was to allow him to graduate:

(Well, you're not really worried about graduating are you? You're holding your own pretty well, or...?) "Oh I'm holding my own. If I don't bear down this term though - this is the most difficult one I've ever had here, mainly because I have so much work. It's...kind of frightening. I could conceivably flunk a course, but I don't think I will."

(Is studying a problem for you this term?) "Well, a little bit, not much...It's kind of difficult sometimes to talk myself out of kissing off, but I have to graduate (LAUGHS LOUDLY)... so I guess I really don't have much choice."

Changed Identity Situation in the Junior Year

The personality changes reviewed can hardly be coincidental; they were a part of a general break-up of the constrained organization of personality that had prevailed over Bob's first two years and during part of his third year.

Is this pattern of changes merely coincidental with the fact that by the end of Bob's junior year he had finally developed a basis for self-respect through his position in his House culminating in his election as its president?

Changed Reaction to Authority

In his senior year, Bob was asked about an episode that occurred just prior to the start of his junior year and led to his quitting the construction crew. Significantly, it involved his criticizing authority:

(There is something that I have been curious about, Bob.

Several summers ago something happened on your construction job, you alluded to something that happened and that you wouldn't go back.) "Oh, that was two years ago. I finished the summer working for the company, and at the end of the summer I was having a pretty hard time keeping the crew together because the company was applying a lot of stringent and rather senseless rules. We were on a job that was way out and they would tell us such things as that we couldn't leave the work area until 5 o'clock on Friday, because...well, I don't know, I didn't get their reasons. At any rate, the whole outcome of the rules were something to make the guys reluctant to do anything extra if there was anything extra to be done and the morale of the crew was pretty low. So at the end of the year they have these forms to be filled out - especially to list what went wrong at the end of the year, if anything did. Generally what they expected you to do was to put your name down at the bottom and X's for no comments. But I took it home and filled it out and kind of blasted the whole outfit a bit with the hope that they would do something the next year. Because of that I didn't really think I would be asked back, and I don't think I really wanted to go back. So I didn't. I simply told them I wasn't coming back the next year."

That Bob's new freedom to criticize authority was a development that was partly a general freeing of the constraints that were a central part of his child self is implied in a senior-year interview on impulse expression and control:

(Well, if you can think back to when you were a freshman -- was there any sphere of thinking, feeling, or acting that you might at some time have felt tempted by but just didn't dare to feel free to give in?) "Possibly, to criticize...criticizing the class, if I had something to say. Or, if a member of our House were to ask what was wrong with the House, something like that. As a freshman I probably would have been quite reticent. I think probably I feel more free in (PAUSE) talking with professors -- than at that time."

(What stands out in the past three years that you have enjoyed doing just for the fun or pleasure?) "Quite a few things. Playing on intramural teams and other sports I was out for. Just about any of the social life -- just for the fun of doing it."

(If you had to pick out something that you found most pleasurable, then what would you pick out?) "Probably the beer and bull sessions with the gang was the most pleasurable activity."

(That wasn't so when you came?) "In the first place, I wasn't 21, and in the second place I didn't feel as free with the fellows."

Not only the general growth of impulse expression, but the directions it took are significant: Bob now felt freer to criticize authority, and he most enjoyed "beer and bull sessions." One could hardly get a clearer statement of the tug-of-war that had been going on inside Bob: to follow uncritically the implied dictates of parental authority or give in to "fun" - to what he liked to do. It would be difficult to find an activity less likely to be approved by father than "beer and bull sessions with the fellows," unless it would be serious involvement with girls, a prohibition that Bob hesitated to challenge as much because of the constraint attendant upon a serious relationship as because it was "fooling around."

Changed Major and Career Objectives in the Junior Year

We have already reviewed a major type of evidence for the "break-out," the long-delayed shift out of chemical engineering. That the critical developments took place in Bob's junior year is suggested by the comparison of his fall interview when he planned a master's degree in chemical engineering and his late spring interview when he said "...chemical engineering is kind of leaving me cold."

Changed Interest in Liberal Arts Courses

Bob's changed attitude away from technical courses and towards humanities courses has been thoroughly documented already. Here is a final example:

(Well, what academic areas have captivated you so far?) "I enjoyed literature, the one literature course I've taken. I enjoyed English (PAUSE) mainly the second half because that involved literature, and I took one other literature course this last term."

Test Score Changes

That the developments Bob made represent big changes is confirmed by large standard score changes in five of the six scales of the Attitude and Opinion Survey. The table below shows the extent of Bob's changes between entrance and graduation as compared to the average change made by the men in his class:

Scale Change	Bob	Class
Increase in Social Maturity	+23	+ 8
Increase in Impulse Expression	+10	+ 3
Decrease in Schizoid Functioning	- 3	- 3
Decrease in "Masculinity"	-14	- 3
Increase in Estheticism	+18	+ 2
Increase in Developmental Status	+27	+10

Senior Year Dissolution

Development and instability go hand in hand. When changes come as fast as they did in Bob's final two years, they are bound to create instability and great subjective uncertainty, even confusion.

In Bob's case, there was the added problem that there was no way of integrating the changes with a new educational plan for his final year. It is not possible to shift from a technical curriculum to a liberal arts major in the junior year of college and still graduate with one's class.

The Overall Senior-Year Picture

The total effect of Bob's extensive changes in his final two years added up to a senior-year picture that sometimes bordered on chaos:

Spring, Junior Year. (What are you getting out of this diversity of friends and diversity of girls that you date, and why do you prefer that?) (LAUGHS.) "Confused. I don't know, it sometimes bothers me because it seems like all of my friends are different and I like something in each of them, but I'm never really sure of what I feel myself or and huh...whether or not they're right. I don't know, after uh...after those small group of friends that I had in high school, I mean, high school was pretty limited as far as the number of friends and the feelings that you get out of that. It's kind of like trying to sample every piece of cake around because there are just so many different people, and their feelings are so different. It's like reading a number of different books...for instance, during high school, I think that I practically ran the gamut of every type of literature that it's possible to read. Everything from scientific documents to western fiction. It has been in some respects a habit of mine to look at everything that's different. I can't really tell whether it's good or bad, the thing that..."

(What would be bad about it?) "The fact that I can never set myself in any specific train of thought. Now and then I'll get really up in arms about civil rights and then, then something will happen to cool me down a bit...when you know so many different people and you get so many viewpoints, it's hard to figure which is right and which you should choose. It's like last year when I came in, after reading this Ayn Rand novel, well, I was impressed by the way she put things down and I felt that was part of the way I wanted to be; just think about material things, let nothing else bother me. Then after talking to other people, I realized that that wasn't all there is to life. I dunno, it's just, like I said before, confusing."

By fall of his senior year, Bob's state was one of acute dissolution:

(What aspects of yourself do you like best and least?) "Best? Well, I think it is that when I am given something to do I can accomplish it in a fairly practical method. I guess the best way to say it is that I am pretty practical in most situations. I don't get carried off in a lot of hair-brained, wild ideas."

"I guess what I like least about myself are my vacillating ideas - I never seem to get a clear viewpoint of what I am doing, or what I want to do, or what I have done. It is all just kind of waves back and forth. I don't know, there doesn't seem to be any definite pattern, because of the way I have done things and the way I continue to do them."

(This is mostly with respect to your career, or are you talking about other things?) "This is just about everything. When I was running for president last spring, there was never any point in the campaign that I was absolutely sure that this was what I wanted. And it just seems that this is the way everything happens. I get a date for Friday night and then by Friday night I am not so sure I want to go out on a date. At the beginning of the term when I decide my courses, for a while there, I think they might be fine; then I have reservations about it. It seems like my whole life has been just one of: 'I think I want to do this, but...'."

(Then you start doubting? You say your whole life has been this way? It has been characteristic of you for a long, long' time? Even during high school?) "I don't think it was so evident in high school. I don't think I really thought about it that much, but particularly since I have been in college."

Fall, Senior Year. (How often do you find yourself getting depressed...feeling blue?) "Well...every other hour (LAUGH) actually, quite often, because I can't really seem to make heads or tails out of what I am doing."

(What is it like?) "More a feeling of being lost...no sense of direction. Kind of...for a few minutes you feel like you have got to start doing something, but when you get on something, a few minutes later you can't quite turn around. What good are you doing when you don't know where you are going?"

(Has this been rather steady in the last three years of college, or has it fluctuated?) "Oh, I think it has fluctuated. My freshman year I don't think it was quite so evident because I was still pretty much in the groove. I was depressed after the first term because of the grades I received, and then I got my grades back up. I can't remember too many times when I was a freshman. But the past two years -- about the same time that the depression rate has been going up."

Spring, Senior Year. (Bob, are things a little clearer about the future yet?) "Well, not much clearer, no. I still don't know what I'm going to do and I won't really know until summer some time and...it depends on what kind of job I get and whether I feel like working for six months or quitting at the end of three. And that depends on things like my friend who wants me to go to France."

There are several noteworthy points about Bob's account. One is that his indecisiveness has always been something of a problem. What we see in his senior year is an acute exaggeration of trends that have long been a part of his personality. It is characteristic that such fractures take place along already creviced lines.

Secondly, Bob confirms the general sequence and timing of the constraining and liberating processes postuled herein. Freshman year things were especially bad when the academic basis of his self-esteem was knocked out, and his depression lightened when his tightening-up response improved his grades. The general constraining reaction which was a part of the whole freshman-year response, Bob thinks of in terms of being "still pretty much in the groove." The "groove" being the whole family-associated frame of reference for guiding his life, including the plan of becoming a chemical engineer, which be brought to college with him.

Thirdly, the dissolution is definitely identified by Bob as a junior-senior year phenomenon. As we have seen, Bob's home-bound plan for his college career began to break down at an accelerated pace between the fall and spring of his junior year.

Finally, the dissolution is not a general personality breakdown, even though Bob's uncertainty tended to creep into many aspects of his life. He still felt secure in his House relationships, the one place where he had established a secure identity after coming to college and, significantly, through his own efforts. Even the original leadership experience that preceded and probably helped this development took place away from home during summer work with the construction crew. It is quite possible that Bob's having such a strong, self-made anchor point as his House position represented played a large role in making him feel secure enough to risk opening up as suddenly as he did on the college major and career front.

The Senior-Year Goal of Unconditional Freedom

There is one curious but highly significant aspect of Bob's wishes for his future as he experienced these in the midst of the senior year chaos:

> (What would you consider a good life for yourself about ten years from now?) (LAUGHS) "It's hard to answer. (LAUGHS) Sometimes I just get the feeling that all I want to do is sleep the rest of my life but, uh (LAUGHS)...."
>
> (Well, what are some of your dreams of glory, ten years from now, what kind of life, what you would like to be doing...?) "It may sounds strange (LAUGHS) but I don't really have any, uh, grand ideas, or any grand dreams, of what I want to do, I (PAUSE) I don't know...(LAUGHS) Well, sometimes I just get the feeling that, uh, all I want to do is be in some sort of position, I really can't say what, but some sort of position in which I can kind of float along and not have too many things to tie me down, be able to just leave when I want to, be able to study when I want to and so on. I don't mean it's...hard to say anything really specific. I suppose...lack of things tying me down, that is about the only thing I could..."

Would it be too speculative to suggest that what is seen above is the subjective correlate of the unalloyed liberating forces that had always been a part of Bob's make-up but had been nurtured in college to the point where they had produced their explosive effect? The following interchange, which took place in the eve of graduation interview seems to reveal, in a like way, the pure impulses of liberation and constraint as seen from within:

> (How is this indecision? Uncomfortable or...not too unpleasant?)

"I...at times when I sit down and think that I really have to get more serious on this and try to see exactly what I'm doing and where I'm going (PAUSE) then there are other times I think, 'Well, I'm still young and I'm not tied down, so there's no reason not to, not to play around a little bit and find out if there's something else that I'm interested in instead of sticking myself in a trap again and trying to force my way into something which I might not like.'"

Bob's feeling that he had been in a trap is particularly interesting; indeed he had been: what he wanted most was to get out of it, be free; avoid any more traps.

A final interchange seems to confirm the whole idea of child self as being central among the forces of constraint, and the college environment and his own inner exploratory time as principal liberating forces:

Spring, Senior Year. (Well, how do you account for this great need for freedom and independence. Where does it come from?) "I suppose part of it is, can be, just a kind of a rebellion of sorts. I mean that before college I was quite dependent. My parents made me so, but I was dependent on them too, I mean it was kind of a mutual thing. They didn't have me tied to the family, or anything. It was a reciprocal...But when I got down here, and things I've done and seen, and talked to other people about, well, it seems to me that there are an awful lot of things you can do when you don't have real close ties that I'd like to do, like travelling and studying things which might not have anything at all to do with what I'm going to do, or be, in the future. If I had a lot of ties, a lot of needs to get into a position of security rapidly, well, I couldn't take the time and the effort to do them."

(So a lot of it stems from - what, just general intellectual security and need to travel...and?) "It's just...you could probably just call it curiosity. Period."

(Which you haven't been able to satisfy thus far?) "I'd like very much to go to Europe, for instance, but, thus far, because of the education things that I've tied myself to, I haven't been able to take the time to do it."

Bob's case raises many interesting questions, whose consideration will be delayed until similar materials have been presented for Pam in the following chapter, at the end of which some theoretical and educational implications of these cases will be taken up.

Chapter IV

CASE STUDY: THE GIRL'S SITUATION: A HOUSE DIVIDED

Peter Madison, Ph.D.

Pam's college career presents interesting parallels and contrasts to Bob's and brings out the special ways in which the girl's situation is different. They were both at the top of their high school classes in terms of grades and scored identically (630) on the verbal aptitude section of the Scholastic Aptitude Test. Even Pam's mathematical aptitude was very high for a girl (670). They tested within a point or two of one another on five of the scales of the Omnibus Personality Inventory, with Pam scoring higher on the sixth, aestheticism.

Pam and Bob had quite similar high school dating patterns. Each had, by and large, avoided entanglement with the other sex. They had devoted themselves with great effectiveness to studies and accomplishments of the kind that teachers and parents approved. They were both very ambitious, Pam even more overly so than Bob. She came to college not only determined to have a career, but aspiring to become an influential public figure, something as high as an Assistant Secretary of State or a member of the President's cabinet. They were in every way model youngsters, the pride of parents, school, community, and of the college admissions office that persuaded them to come. Their being so ideal may be why both faced, as the major developmental task of their college years, the great problem of the young who represent ideals to adults: differentiating between what they wanted for themselves and what adults (their parents) wanted for them -- and learning to implement this distinction in action. They even made the break with their parent-associated child selves at a similar point in college -- in the middle of their junior year -- and the academic and career repercussions on the junior year was very great in each case.

The great contrast between Pam and Bob was in their backgrounds. Not so much in basic home values, since both families valued education, hard work, achievement, and shared the usual middle class and professional family attitudes. The contrast was rather between the cultural isolation of Bob's home, which, it will be recalled, was six miles from a very small town which was, in turn, over thirty miles from a small city, and Pam's more urban experience. She grew up in a small city and moved to a very large one during high school. Bob's family did not have the money to travel and his experience of the world did not extend beyond working up the river a few miles away on a construction crew. Pam's family was relatively well-to-do and on her mother's side was among the social elite of a large city. She had traveled abroad with her family and her father was a high-ranking administrator with city and state-wide contacts. Her family was at the top in terms of social background, father's conspicuous public accomplishment, and generally being "in" on all that Bob had missed, and hungered for.

One direct consequence of their great differences in background was that Pam suffered only the most transitory qualms about her status in the student culture. There were none of the background and identity shocks that bludgeoned Bob. She was, from the outset, a part of an élite group, a campus "queen" (Pam was a beautiful girl).

But Pam was a girl, and her sensitive and thoughtful reflections on her college career reveal the very real ways in which the girl's situation is special, and how this specialness produces a distinctive kind of interaction between education, career, marriage, and the normal developmental problems of the college years. This interaction comes out with special clarity in Pam's case just because she differed in certain respects from her group. Her high ambition, devotion to studies and the paucity of pre-college dating experience would not be typical of a good-looking girl whose family background at once assured her of a secure place with the high school and college campus social elite. Pam also had a high degree of social consciousness, an interest in doing something about the human problems of the disadvantaged in society. Finally, her very strong attachment to and admiration of her successful father as her own personal ideal, while not unusual among college women, was distinctive in its intensity and in the role it played in her college career. These special features worked to accentuate problems that are common to college girls and to give them added clarity, which is why Pam's case is so valuable.

The central theme of Pam's story revolves around her relationship to her father, her initial determination to avoid commitments to boys that would in any way interfere with her personal development, her high ambition, and how all three of these changed in college. She ended up going steady while protesting it, deciding that just being a "homebody" might be interesting, and concluding that what she wanted in life and what father wanted for her were not at all the same thing. Not the least interesting aspect of all these changes was Pam's own feeling of being helplessly caught up in them, of doing what she found herself doing without having given consent to it. Let us look at Pam's starting organization along those dimensions that played a principal role in her college experience.

THE ENTERING FRESHMAN PICTURE

The problem of the talented and ambitious girl who wants a career is that she has to develop and manage two of them, since in all but an insignificant minority of cases marriage is from the outset defined as an already-decided upon career that the girl wants as well as wanting something more. Not that the boy differs in his ultimate interest in being married and having a family. But the boy does not look upon marriage and family as a career, something that will occupy a major portion of his life's work. As in Bob's case, the boy wants marriage, assumes that it will come readily enough when he is ready for it, and that it will be a source of personal and vocational support to him. The vocational future is a single, integrated whole for the boy. For the girl, the issue is divisive. Here is how Pam described it:

November, Freshman Year. (As you look ahead at the next four years, are there things that you look forward to with a little apprehension?) "Well, I think the biggest, uh, not really problem, but, uh, I don't know, an indefinite sort of obstacle, or whatever you want to call it, would be -- I think this is as hard for a lot of girls -- that I'm not sure exactly what I want to do. There's no problem right now, because I don't have any decision to make right now. But the problem would be whether I would go on to get a graduate degree, which I am thinking of now, and then go into a profession, or whether I'd be willing to settle down. This question may never even come up, but I think that even if it did come up, it would be a hard decision to make, because I've always wanted to have an outside career."

Career

Interestingly enough, Pam did not reveal the high level of her initial career ambitions until her junior year when she looked back at the freshman scene:

November, Junior Year. "...when I first came to college, I had all these aspirations: maybe I'd be the first women Assistant Secretary of State, or something..."

That this was not a passing phrase is indicated by Pam's repetition of the same idea five months later:

May, Junior Year. "I'm thinking back about how I've changed in the past three years. Because when I first came here I was going to be Assistant Secretary of State, or something like that."

Of course, Pam was probably not using "Assistant Secretary of State" as a specific career goal (although it may well have been a phantasy-level goal), but it suggests that she came to college with the idea of becoming an important and influential person in her after-college career.

Pam's initial feelings about some of the traditional roles for women (housewife and secretarial work in this case) are clear from this interchange:

May, Sophomore Year. (What kind of life would you consider bad for yourself 10 years from now?) "It would be unbearable being stuck with a job that you didn't like, whether it involved staying at home and taking care of the house, if you didn't like this, or whether it involved secretarial work."

College Major

Pam's feelings about possible college majors were appropriate to her hope that she might become an influential figure. They also reflected some of the same high school and home influences that supported her career interest:

November, Freshman Year. (Have you thought about a major?) "Yes, I have. I think somewhere in the field of political science or history. The first thing that made me even start thinking of these possibilities was a teacher I had as a freshman in high school who taught a course in government. She took me with her to several things at a university which was located in our city. We heard the Secretary of State speak at one conference. Anyway, I became very interested in current affairs and she told me at the time that she thought this was probably my best field. It always has been something that I think held my interest more than anything else."

"Then in my junior year in high school, the World History teacher taught such a stimulating class that I decided then, I think, that this was what I wanted to go into. And there's nothing else that interests me nearly as much."

(How do your parents feel about this?) "They think this is a good deal to go into if you're really interested. Before I came to college this summer I was talking to my father and he feels that at least during the first year he wants me to try lots of different things."

"My father has always had the feeling that I had musical talent. Well, I enjoy playing a number of string instruments but I don't think I play well enough to ever make it into a career. This is the only conflict I've ever had with my father. So I don't think he's completely satisfied. I think my mother is. She thinks it's fine, if this is what I want to do."

Fall, Freshman Year. (Do either of your parents have special interests?) "They both enjoy classical literature very much...my father is very interested in the history of music and I think he knows as much about it as a good many semi-experts do. My mother had it in college so she's followed right along with it. They both love to travel. When I was in 9th grade my brother and I went to Europe with them and I got more out of that summer than anything else I have ever done in my life. Before we went, my father made my brother and me study a certain amount of history of music. So we spent a month working together, and this was very helpful. When we heard concerts they meant something to us. Ever since then, I'll hear music that we heard at concerts on that trip -- I can still hear the symphonies I heard then so clearly. I've had a completely different viewpoint as far as history of music goes."

Spring, Freshman Year. (Your major is still political science?) "Or history, one of the two."

(In the course of a discussion about going abroad): "I'd like to go to Salzburg because I really like history of music, and you couldn't ask for a more ideal place."

Boys, Dating and Going Steady

An important part of Pam's initial plan for herself was that she would avoid commitments to boys that would interfere with her freedom to explore freely college life and to find and develop her potentialities:

November, Freshman Year. (Have you gone out with the same person or with a variety of people?) "For the first three weeks I went out with the same boy, one whom I knew before coming to college. I really enjoyed being with him but I realized that it is foolish for anyone to come to college to date just one person, especially a freshman. You tend to depend on them. Right at the beginning of your freshman year you have an unusually good opportunity to meet all different kinds of people, and if you tie yourself down with one person, you're hurting yourself. You're limiting your friendships, friendships that will pay off later.

"He started dating other people and I did, too. So lately I've been dating all sorts of people. I really find that it's a much better sort of experience."

Pam's initial organization of the going-steady problem was consistent with her pre-college attitudes:

November, Freshman Year. (Did you ever go steady before you came to college?) "I don't really think I've ever gotten that deeply involved, mainly because my parents had always emphasized that going steady is really a serious mistake. I think that this developed a reaction in me; I just never was really interested in boys. If you really go steady, you have to give up too many of your individual wants. If I ever give them up, it's going to have to be someone who really means a lot to me."

May, Freshman Year. (How were the teen years?) "I didn't date much when I was in high school, and, frankly, it was a good thing for me. You grow up a lot when you come to college. In high school I mainly studied and I think I learned how to get along with girls. To be happiest, you first have to get along with girls. If there are any girls in the dorm who are unhappy, I think it's because they can't get along with the girls."

Pam's Relationship to Her Parents

The fourth major component of Pam's college story - her relationship to her parents - emerged clearly only in the material from her upper class years during the period when the relationship was undergoing major changes, but a great deal about how matters stood at entrance to college can be inferred from the following interview excerpts from the first year:

Fall, Freshman Year. "Yes, I think that my parents are pleased with my career plans. Actually, they've never told any of us children what we have to do."

(What effect has your father's high administrative position had upon your life?) "Well, in the small city where I grew up, which is very much smaller than the large one we moved to in my sophomore year in high school, the city put more emphasis on my father's position. I almost felt as though he were President of the United States, almost as though I had the same problems as someone whose father was President would have. Maybe I made too much of it, but I was very sensitive to it in that I didn't like to have my last name mentioned in a lot of places because then people would associate me with him. I felt as though I could never really be myself because whatever I did would reflect upon him. People tended to expect a lot from me, which, in a way, was an advantage because...people seemed to have a good opinion of me; then it was up to me to maintain it. I didn't like to do a lot of things with the kids in the town because, deep down inside, I could never really be sure whether they fully accepted me just for myself. So, although my father's position had great advantages, I tended to feel sorry for myself because of it. But in the larger city we moved to, it was no problem at all."

(Your mother must have had quite a challenge to meet?) "I don't think she was very happy in the small city where we used to live. She had come from a much larger city nearby and her friends were there, and she had a much wider life where she came from. Now she was kind of in the public light too. My mother is a fairly shy person anyway, so I think it helped her. But she was so limited as far as social things go. Her parents had been very wealthy and she didn't really have very much in common with the people there. The people were very fond of her because you can't help but feel as though she's a very sweet person. But I don't think she enjoyed life there. The attitudes of people on things like smoking were very narrow and she had never met this before. Being in everyone's view all the time, she had to be conscious of this. She's much happier now."

Spring, Freshman Year. (What gets you into trouble at home, and who punishes you?) "The thing that gets me into trouble most is that I talk back to my parents and my father always punishes me for this."

(Does he punish you for talking back to him, or to your mother?) "If I talk back to Mother and he's in the room, well, he just won't take this at all. To a certain extent, he will argue with me, because I think he realizes that I have inherited this from him. He does punish me - I can't think of anything though. They are really very lenient with me. Occasionally, they'll send me to my room. If we are arguing at the table and if I get up and start to leave, he will say, 'Come back,' and for about five seconds there's inner conflict as to whether I should just go on, or whether I should come back and do as he says, and I always go back. He used to get very upset with me for staying up late at night because he said it was detrimental to my health, and he would come in and turn the lights out."

(Who is boss in your family, and what sort of things do you disagree about in the family?) "My father's boss; there's just no doubt about that. He and my mother agree on most things."

(Would you say they get along, or bicker?) "When I was little (my room's right next to theirs) and I would hear them arguing, I would get very upset. As I have grown up, I have realized that my father's short-tempered, and so he will get angry with my mother, but then he will be sorry afterwards, and she's learned that you just accept him. He has to have someone to be angry with; so these are never serious. I think they have a completely ideal marriage."

(If you could change whatever you wanted from your past, including your family, what would you have different?) "I wouldn't change my attitude towards my family because I feel very close to them. But I'm impatient with my brother and sister and with my mother because I know she will take it. I would change this because they are so good to me and I sometimes really feel badly when I think back at some of the ways I've been."

Fall, Sophomore Year. (With whom in the family did you spend the most time this past summer?) "My brother. I've always been closer to him than to my sister. She is like my mother, as far as temperament goes, and, strangely enough, she's named after mother's side of the family. My brother and I are named after Daddy's side of the family and we are both like my father."

(What disagreements did you have with your father this summer and how did you react?) "The biggest disagreement with my father was over my hair style and the sort of clothes I wore. I think my appearance is my private domain and all summer long he kept making suggestions and critical comments. My mother sided with me on this -- that my appearance was my own personal matter. This summer it seemed to me that Daddy was just more unreasonable than ever over minor things. I think it was partly that he was trying to prove to himself that he had authority. He doesn't want to let go, I think, maybe the tendency of the father to hold on is stronger if there is a close father-daughter relationship and it's kind of a compliment to me. Mother is more understanding at this point...she is growing right along with me rather than responding with counter-measures...the more people I meet, the more grateful I am that mother and daddy are the way they are.

"I had no conflict of any kind with mother over summer."

THE FORCES OF CHANGE

In Bob's case, one could speak meaningfully of the "forces of liberation and constraint." There were not only two broad sets of forces opposed to one another; the onlooker was in no doubt as to the desirability of Bob freeing himself from a too confining life plan. In Pam's case, the forces that came into play were just as powerful and the conflict as acute, but the desirability of the directions they moved Pam in is far less clear to the observer; Pam herself was very unsure, at times, whether she liked what was happening to her. One thing is clear: the interplay of forces in her case does illuminate the ways in which the girl's situation is special and shows how these forces interact with the girl's personality development, her feelings about career and marriage, and how what is going on along these fronts affects the girl's educational situation.

Going Steady

A pretty freshman girl on a campus filled with vigorous young men cannot avoid facing the demands of the boy that she commit herself to going steady, being "pinned," and the consequences that such an exclusive relationship to one boy has for her development in the college years.

The Eroding Forces

Pam was not seen by the research staff between November and May of her freshman year, during which time some critical changes developed in her decision to avoid going steady. A fall-term, sophomore-year interview in which she reflected on the freshman girl's situation gives some hints as to the pressures she must have felt:

October, Sophomore Year. (If you were advising an entering freshman girl about the first year of college, what would you tell her?) "The main thing would be not to succumb to social pressure. There is a tremendous social pressure on a freshman girl. Some people don't feel this pressure because they're only interested in study and, therefore, they couldn't care less about it. However, among girls who do like to date and to whom it has any meaning at all, there is the pressure to have dates, and then it becomes a matter of prestige.

"For instance, at the beginning of the school year, the fraternities have these 'happy hours' and stuff to which they ask a very small percentage of freshman girls, based entirely on just wandering around and picking the ones they think are most attractive. There is a pressure among girls to get these invitations, which is ridiculous because the things these fraternities have are just the most superficial things that I can imagine. But still, there's this initial pressure, which is too bad anyway. There are enough pressures that are really important to have to worry about something like this.

"So I think my advice would be not to succumb to this pressure. That, rather, the freshman girl should worry more about relationships with girls, and getting her studies done, relating to her classes, keeping up with the work, and everything else."

While Pam was speaking of the freshman girl in the foregoing passage, it seems likely that she was describing the inner pressures to date that she herself had felt in the early weeks of college. The eroding forces are further described in this end-of-the-freshman-year interview:

May, Freshman Year. (What sort of dating practices do you approve or disapprove of?) "At the beginning of the year, I would definitely have said that it was wrong to date just one boy. But, naturally, my views on this have changed. I still think it is good to date lots of different people, but it's hard to do that here at this college. For instance, I know one girl on our hall who does date lots of different people, and I've heard freshman boys say, 'Why take her out because you know that she may not have time to go out with you again?' They feel as though there's no hope because, even if they begin to want to take her out a lot, she would consider them just one of the many. So that you're put in a hard situation in a way. I think it really depends on the person. If you find someone that you would like to date exclusively, I think that is fine. I think too many girls are looking for one particular boy whom they can date exclusively. I think this is wrong. I think you have to meet someone; it can't be something you plan to do."

Capitulation

By the end of her freshman year, Pam was going steady:

(Has there been any change in your dating habits?) "Now I'm dating just one boy and before I wasn't. I just met someone. It was fine before, just dating when you wanted to on weekends, but, frankly, you get to the point where you are spreading yourself thin. It wasn't that I was looking for one person to date, it just happened. Usually we go out one night on the weekend and study together. And you're not so tired from going out different places. I really enjoy it very much."

At the end of her sophomore year, Pam was pinned:

(Has anything else happened since last fall?) "Neil and I are pinned, but it doesn't make much difference because there's no change in the relationship at all. Actually, we thought more about the formality of getting pinned last fall, but Neil was not an active member of a fraternity and he didn't have a pin... and then, although I don't really care about what other people think, it really began to be funny: people would ask, 'Why aren't you pinned. What's wrong?' We'd say, 'Nothing is wrong.' So when he finally got a pin, we just got pinned."

Pam's quick capitulation may be interpreted as indicating that her protests about the undesirability of going steady were only a superficial attitude and hence easy to change, or it may be an indication that the power of the forces involved are far greater than we appreciate. That Pam's attitude was not superficial is suggested by her senior year restatement of the matter in which she strongly endorsed the idea that a girl should not commit herself to a boy so early, while recognizing that she had done exactly what she disapproved of:

October, Senior Year. (What do you do now that you felt you ought not to do when you entered college?) "When I first came here I thought definitely that when I was my present age I would not be thinking about marriage; that I would not be relating my goals or future plans to any other person. I thought that it was unwise; it was wrong - not in a moral sense, but a mistake. I thought this because this is what my father told me for a long time. And I believe it; I really do. I think it is a mistake, and I would teach my children the same thing. But I am doing it now."

The Interaction Between Going Steady, Career and Education

As Pam was soon to discover, deciding to go steady is not just a convenient arrangement for dealing with social life and with boy-girl relationships; it may have a profound effect upon the girl's educational and personality development and set her life upon a course that she had not anticipated that it would take. By fall of her sophomore year the potential conflict between her career and marriage wishes had begun to materialize:

October, Sophomore Year. (What career do you lean toward?) "Well, this is actually a major and minor conflict, a personal conflict. Since I was in high school I have always wanted to get a bachelor's degree and then get a master's. Not get a Ph.D. Then do something with either the government, such as the information agency, or in the foreign branch of some kind of private institution, such as a corporation. This is what I want to do, ideally. However, I would have to admit that Neil enters in. There is a major...now this is something I have to deal with.

"In a way, I'm really sorry that I've met Neil as early as I have because...I mean, if it came to choosing (after I got out of college), if it came to choosing between someone I really liked, or getting this job, I think I would probably get married. But yet, it would be so much easier if I didn't have to make any decision like this. If there was not the complication of having someone I might possibly marry, this is what I would ideally like to do. But now I don't know how it would be modified. I really...it's too early to say."

Just what inner changes went on during the sophomore year is unclear from Pam's data. There are some suggestive clues. For one thing, after committing herself to Neil, she found that her scholarly drive was gone:

May, Sophomore Year. "This quarter I loved my courses and I loved my instructors, but I had no motivation, and I know that I don't, and it's the most disappointing thing in the world, as a personal thing in yourself."

Then, too, Pam began talking of "success" in different terms:

(What do you think the world will be like 10 years from now?) "My views have changed since I first came to college. When I first came here I thought a good life, well, a basic part of it, was success. I think I equated success with importance and influence in a really large sphere on things that went on. I have changed my opinion...I think I now equate success with doing whatever you are doing well, and having something to do that is constantly new so that you never get to the end and you never lose interest in it. It is success if you can find something like this and if you find something like this, you will be happy.

"I think you also have to have a happy relationship with someone else if you want to have a happy family life. And this is what I would consider success."

But, in a different corner of her personality, Pam's self-ideal of being a figure of power and influence was still with her:

May, Sophomore Year. (Whom do you admire - living, fictional and historical figures - and who would you wish to be like?) "I think I would like to be like Professor Owen in that I would like to have...well, I never could, because he is the kind of man who was in China in the Second World War and he formulated a lot of American policy. Well, nobody could ever go back and do exactly the same thing, but to have the interest and experience he has. I think I'd like to be like this."

An Attempt at Synthesis

Aside from these small clues that far-reaching changes were taking place within Pam, the college major, career, and marriage issues seemed mostly to have simmered under the surface of Pam's life. But over the summer following her sophomore year, Pam developed a plan to implement her long standing wish to have a career:

November, Junior Year. (What is your major?) "History... last year I decided I wanted to specialize in Far Eastern History. So then I started to think about what I was going to do when I got out of college. And, actually, the only thing I could do with an interest like Far Eastern History would be some kind of research work, which would require an advanced degree. Or, just teach, and I do not want to teach. So I thought that the only way I could use this interest in Far Eastern History and really get involved in this interest, was to learn one of the Indian languages. India appeals to me. So I decided to learn Bengali. This language appealed to me because it is a more truly Indian language than Hindi."

(And this with what purpose in mind?) "I really don't know. I don't know what I will do. I think I'll probably get a master's degree in Indian Studies because at graduation from college, I won't be competent enough in the language." And then I would like to get some kind of job. I don't really know what. Something like an import-export firm, or I might find something I was really interested in and go on with it, do some kind of research. I don't know, really."

(Can you tell me a little bit about your experience with Bengali and your reaction to the History of Modern India course?) "Well, I love Bengali. It's really an interesting language to learn. Somehow, I just like it. I like the way it sounds and I like the grammar. We haven't gotten into it far enough so that I can read it very well as yet, so I don't know how it will be. But I always thought the language had a very pretty sound. So I think it will be interesting to learn it.

"One of the things I like about the people of India is that they have a concept about individuals as human beings which is reflected in the language. It's kind of pretty because it's almost naive, and it's the kind of thing that just makes you feel pretty good."

(What made you pick India and Bengali?) "I don't really know. I liked Far Eastern History very much. One of the things I liked was that the people of India have been a pretty tolerant people as far as religion goes. And they have been a people who were able to take foreign ideas and be able to take the things that were good and...yet keep a certain part of their own character, their own heritage; they could accept and reject according to their history and their way of thinking. I like this very much. They didn't have this superior view that some Far-Eastern people have. And, as I said, they've been very tolerant, overall, as far as religion goes. They leave it up to the individual more or less and I particularly admire this.

"I think, to a certain extent, my idea of India is somewhat romantic. You think of places like Taj Mahal and things.

"To be perfectly practical about it, it's a good type of foreign exchange to be involved in right now because the Indian people are trying to improve their economic status. And America will have quite a few economic relations with them. That's just from the practical viewpoint."

(What would you say was your best course thus far in college?) "Overall, Indian literature is my best course. I have a wonderful teacher. He presents the material as well as anyone could present it. I just love it. I hope this isn't just the newness of it. The professor is an extremely gentle person. He tries to make it as clear as he can. He understands that certain people in the class don't grasp it and he...drills these people a little more than others. He never becomes angry, he never becomes upset with anyone. He just kind of expresses the attitude, 'Well, you'll get it, keep trying.' And he has a wonderful sense of humor and so his classes are always enjoyable."

(Have your interests changed since high school?) "I've always been interested in history. This was true in high school. I don't think that I had any definite interests that I wanted to pursue when I was in high school. I wasn't certain about anything."

(Do you feel definite about it now?) "I feel better than I ever have in that this summer when I decided for sure I wanted to take Indian Studies, it was as though someone had given me a wonderful gift, because it was something I really wanted to do and I wanted to do well, and I knew that I would always have this interest from now on, and it was something I could take that would be mine. I think everyone should have a little interest they can call just 'mine'."

(Do you remember the circumstances when you made this decision for Indian Studies?) "It was my father that suggested that I think about it. And then I heard that they were coming out with a special program, and this really seemed to be just the answer to everything. I don't remember when I made the decision though."

At the end of the interview from which the above excerpts were taken, Pam reflected thoughtfully on her college life and the meaning of the changes she had undergone:

(And then my last question, apart from academic work: what has been happening in your life in the last two years that has been of great importance to you?) "There are two most important things. The first one is that I decided what I wanted to do. Which, to me, just settles so many things. And secondly, I think that I've found a person I want to marry. Which is... uh, well, it's not really very satisfying because I think the ideal thing to do is to go through college and then have two years, or three years, of your own, and then get married. But... things just don't always work in what would seem to be the most practical way. I really think a person who can go through school and then have two years of his own, and not be particularly interested in anybody, but just enjoy a lot of people and have lots of relationships, has a great advantage. Theoretically, this would be the ideal way to do it. But if you find somebody you want to share with, well, then this is the best way, under the circumstances. But, if you make a generalization and plan for people a best way, you shouldn't encourage them to look for someone to marry that young."

(Then you plan to get married?) "Oh, not for a long time, not at least...we're both juniors, and then he has graduate school. And certainly his first year of graduate school, he'll have too many adjustments to make as far as that goes to have to worry about a wife or anything. And I have to finish with my Bengali so that I can start using it. So I don't know, it will be at least four years, I imagine. But it ties you down to definite plans. And it's kind of fun if you can decide, 'Well, I want to use Bengali, I don't know what I want to do, maybe I'll go to India for two years.' Which...would be a wonderful thing to do. I don't want to go to India for two years now, if Neil couldn't come with me."

(Does he agree with the way things are?) "Oh yes."

(Would you like to add anything?) "No, except that there's something very funny. I've been thinking about this...about how, how I've developed in the last few years. I was trying to think what you all will decide. And it's really funny because I really think, when I first came to college, I had all these aspirations, maybe I'd be the first female Assistant Secretary of State, or something, and I think you're going to find that my aims on the surface seem a lot lower than they did before. I'm much more satisfied with me, I think I'm much more realistic. And I somehow don't seem to think of my role in the world as being anything particularly outstanding. I used to think you had to be someone really important to contribute something. I somehow think now if you can just be a sensitive and understanding, intelligent, and constantly-growing person in your own tiny little capacity, if everyone could do this in their own little insignificant roles, how much better everything would be. So, as I said, on the surface, I think my aims have seemed to have dropped, I don't really think they have."

(That is sort of a shift, what do you ascribe it to?) "I think the reason I had these views before was the influence of my father. He and I are a great deal alike, and we're very close, and I probably respect him more than anybody I know. I'm prejudiced, of course, but I really think he's a great man. You know, you don't have very many who come along, but he is one big exception. He's a great man. And I used to think I had to try to live up to what he'd done. But I realize now that perhaps great men certainly do help become what they are, but you're born with the spark in you. I mean some people have it and some people don't. And...I just wouldn't. I just wouldn't add...I'm not the kind of person who would add anything, try to do something that was really important, because this just isn't me. At all. And so, realizing this...so perhaps getting away from my family and finding out what I'm really like, and the kind of tendencies that I have has helped change this idea that I had before. Before I put it on the basis of looking about me, you know, and seeing what I was going to do. And I think it is more looking inside, and seeing, not what I'm expected to do, or not what would look best to other people, but seeing what I really want. All through high school I was a very aggressive person, and I went to a high school in which I was one of the smarter students, therefore I had some illusions as to my intelligence. I think I thought I was much smarter than I am. And it was very important that I prove to people how intelligent I was. And now, somehow, this isn't really important. The only thing my intelligence really means to me is that I can always be interested in something.

"And I try to understand as best I can things that are happening. But I mean, as far as being a display, or as far as making my intelligence overt, that just doesn't matter at all any more. And so, I'm much, I think, less aggressive. I used to think that it was really good for a woman to strive to do things that men did. And I think this is true. I think a woman should use her intelligence to the fullest. However, I wouldn't really approve of a woman making important decisions in the State Department. Because I really think that this is, I don't know, I really think it's a man's field."

(Even for somebody like the late Eleanor Roosevelt?) "No, Eleanor Roosevelt wasn't the typical woman. She, to a certain extent, had a good many feminine qualities, but she also was able to incorporate a lot of the qualities that I think make a man, for instance, better than a woman in politics. And she was able to incorporate these and still be gracious, nonetheless. But she was an exceptional woman. But I mean, on the whole, I think...I wouldn't vote for a woman."

(What qualities come to mind that a woman statesman should have?) "Well, in the first place, she needs to have the confidence of people. And I don't really think our society has gotten to the point where men, or even a lot of women, would have confidence in the decisions, political decisions, that a woman makes. Also, I think that a politician, the President or Secretary of State, has to be compromising, and he has to be shrewd to know when to make the compromise, and I somehow think that most women, in general, can't make hard-line compromises. And, of course, this has to be judged on the basis of what I know about women, which is my mother or people like her, me, or my sister and all. Not only that, I don't think that a woman who would be this way would be very happy. Because I think she wouldn't belong, would be kind of lost in society, you know. Unless, as I said, she were an exception, someone like Eleanor Roosevelt."

Dissolution

Pam's exhiliration at having found a "place" for herself in the world beyond her commitment to the role of "wife" carried her happily through two terms of intensive Bengali at the head of the class. But suddenly she could not go on and found herself in an acute crisis whose structure reveals the dilemma of the college girls who wants a career:

May, Junior Year. (What has happened since our Fall interview?) "Well, I was taking Bengali then. I signed up for two quarters. I stopped this spring quarter because it got into the written part, and it's just too much for me to handle right now. So I stopped that and started taking history courses again. But I'm still going to India this summer and live with a non-English speaking Indian family."

(What junior-year experience did you find particularly unsatisfactory?) "Well, when I gave up Indian studies I went through a period of self-reassessment or something. I'm thinking back about how I have changed in the past three years. 'Cause when I first came here I was going to be an Assistant Secretary of State or something like that. I realize that Bengali was just a part of it. But it made me look at myself and realize that I have changed quite a bit. And I tried to figure out if I really like the change or not.

"There were some things that I (PAUSE) thought were positive but then there were a lot of things that were negative. I think most of it was that I had fallen into the rut of living too much in the present, and not really thinking about...I didn't have any excitement over things that I used to have, and it was really depressing for about two weeks, but, in the long run, it was good. It wasn't just Indian studies, there were big, influential things involved. It was a combination of three things:

"First or all, Bengali had gotten to the point where the script was very difficult to learn, a real mental impossibility, I just got depressed. I realized that I didn't really want to have to do this every day. I'd be satisfied for the time being with the oral part.

"I decided that perhaps starting Bengali had been a mistake, a sudden decision about something I didn't really know anything about, but which I would be doing for the rest of my life. At the same time I realized that if I dropped it and couldn't read the language, the possibilities of getting a job outside India wouldn't be that great. So I lost a bit of self confidence and then, looking back on it, then it was just a downward slide, down...all sorts of things.

"Another thing was a wedding of a friend of mine who was getting married to a best friend of Neil's whom she had known since summer. And I admit I was really jealous of her. Neil was in the wedding so this took a lot of time and I didn't get to see him very much. This is the thing that made me start thinking about getting married. Boys always say it is so much easier for a girl to decide what she is going to do because a girl doesn't have to support a family, but I don't agree with this. I think it is equally hard because, if you find someone that you want to marry, you still have to think about how you are going to prepare yourself so that once you get married you don't get into this rut. I realized that was going to happen. I had almost become a married woman before even getting married. I really didn't know what to do about it.

"When I say 'in the rut of a married woman,' the thing that depresses me most about married women is that they are not individuals. And I really wasn't an individual. Everything I did was geared around Neil's convenience -- the time, things like this ...it was really that I had gotten to be a shell, I really had. This is what I mean by 'being in the rut of a married woman.' I wasn't really a person any more.

"The third thing was the loss of self confidence I felt because I had been a failure in dropping Bengali...this was the only way I could see it at that time. When I say 'a failure,' first of all, this is one thing that a lot of people didn't realize. They can't understand what I was so upset about. I had this class for two hours every day. I was extremely fond of my teacher. I was really committed to this class, and I was making the best grades in the class. And when I say that dropping out meant that I was a failure, I mean that I just had let myself down. I really wanted to stay in the class and I really missed it for a while.

"In the larger sense, I had made this commitment to myself at the beginning of the whole thing that this is what I was going to do - as a career - not realizing that to be fully competent in the language would take four or five years. Everything, all about the future, and what I was going to do had been wrapped up in Indian studies. I had no alternatives open to me. There had been no doubt in my mind at all that this was what I would be doing. So I had to re-adjust this. So that was one of the factors that I resolved. I wouldn't say resolved, I just kind of got things straightened out, back into perspective maybe. After a while, I realized that even if I don't go into something requiring the Bengali language, this doesn't really matter. It will still be a valuable experience.

"I'm not sure now whether that would be what I would want to do, what kind of a job I would like to get. I decided not to worry about this problem of jobs. I have seen a lot of people working who I am sure are more stupid than I. If they can do it I can do it. So I convinced myself maybe it wasn't the end of the world: that there would be something I could do in the future: and that everything didn't hinge on Indian studies.

"It's not that I'm not concerned about the question of 'What are you going to do when you get out of college,' but there's nothing really I can do about it now. I could decide that I wanted to be a teacher, but I don't want to be a teacher, so that it's really indefinite now. But I don't care that it's indefinite.

"The other thing, as I said, was this wedding of a friend of mine, and I really don't think it would have bothered me so much if it had not been for this wedding. It really upset me something, but after the wedding was over I decided I really didn't want to be married anyhow, and that resolved it.

"I don't know exactly what it was that brought me out of it. My parents came for a meeting in a nearby city and when they came I was already fine again. But I talked to Daddy at length about the whole thing. I decided for a while that I wasn't going to go to India. I didn't see any point in spending money to go there because I had been thinking of going to India in terms of preparation for a job. I hadn't even thought of it as something of an experience in itself."

(Were you able to talk to your friends during the period when you were revaluating your objectives?) "Well, they knew that I was depressed. I couldn't really explain it to them at the time. I could explain to them in terms of dropping Bengali or I could explain it in terms of just thinking about getting married, but I couldn't exactly define, relate anything. So that I don't think anybody really knew why I was depressed. Everybody knew I was depressed...but I don't think anyone really understood the whole thing."

(Why did you decide you didn't want to be married?) "Well, I don't know...there just seemed to be more things to do here. In the first place, I don't know enough outside of marriage to be married, and in the second place, I suppose I don't want to be a housewife yet."

(When do you expect to get married?) "Well, I really don't know. When Neil was planning to go to graduate school, we were going to wait until after his first year in graduate school. Actually, the main thing, as far as when it is practical, would be when I get a job, because, whatever he does, he is going to have to go to graduate school, and I'm going to have to be supporting him, because we've both decided we won't ask our parents to help. So that, in terms of when it's possible, that would be the best thing.

"In terms of when it's wise, we don't know. It depends upon what he finally decides, whether he wants to get a Ph.D., or whether he wants to go to graduate school in business."

(And what is your decision about getting a job?) "I'd like to get a job as soon as I get out of college."

(With a bachelor of arts degree?) "Yes. Oh, I don't want to go on to graduate school. Not just because I want to get married; even if I didn't have any marital prospects for the future, I want to get out. I really have led such a sheltered life. I may get tired of working after a while, but I want to see what it is like."

(What can you visualize yourself trying to do?) "Well, I'm not really sure. As I said, I don't want to teach. I thought I might like to work in a bank. I don't know what I could do in a bank, but I just like the atmosphere. I haven't had any experience with it. I think it would really be fun to work in a bank.

"Actually, I have no idea. I've been looking through catalogues about jobs available, and, I don't know -- the only criterion I have is that I'm doing a job that is interesting every day, that isn't a routine that is going to be the same every day, and that I'm with people."

(How do you feel about marriage and a career?) "Well, I think if you don't have children a career is a must, at least for me it would be. By career I mean doing something outside of the house, even if you are in charge of the volunteers in a hospital. As far as children go, I really don't know. I can't see sitting home all day taking care of a baby. But yet, I feel as though a mother should be with her child. So I think I'll have to wait and see how it works out. And when your children are grown, you should get back into something.

"During your junior year, you can see a lot of girls are getting engaged, and...when people say the women at this college, or any girls, go to college to get married, this really infuriates me. Because none of these girls came to college with this idea at all. But when you see so many people around you getting married, it doesn't necessarily mean that you'd like to get married, but I think a lot of them would feel more secure if they could at least find somebody with whom to have a meaningful relationship. Maybe not even somebody that they'd marry but if there'd just be this sense of security there. And most of my friends don't have this, and I think that, therefore, the future really does look like a huge, nebulous, blank spot. They think, 'Good grief, I'll be graduating from college, then where do you meet people?'

"Most girls that I talk to are really concerned. When you are an under-classman you don't even think about marriage. Now people are thinking about marriage. Some people talk about it more than others, but I think basically most girls who come here have fairly good minds, and I think people are really scared of getting into a rut, because you look around and you know how easy it is."

Pam's sensitive analysis tells its own story. It remains to point out that it was no small crisis that she underwent, and that it was so difficult because, in the clash of forces, she knew she was giving up something that had been very precious to her, something that she could hardly explain to her friends. The girls in Pam's circle were more traditional women than she was, more interested in just being a part of a comfortable social group and not planning careers beyond what is expected of the educated suburban housewife. They could understand her concerns about marriage, or about dropping a favorite course, but it would not have occurred to them that much more was involved as far as Pam was concerned. As her depression indicates, the issue involved struck deep at a central aspect of her self, at something she had brought to college with her and held close, a part of her childhood, and of her special relationship to her father.

SENIOR YEAR OUTCOMES

Career

During the summer following her junior year, Pam found that her life-long wish for a career would not die so easily. It revived, but took a different turn:

October, Senior Year. (What changes have there been in your major or career plans?) "Well, the dressmaker I have gone to for years told me that a daughter of hers is going into child welfare. Always before I thought of child welfare as just lugging babies to clinics for check-ups or giving out money. My dressmaker told me that her daughter is going to the university to get her master's. I had been thinking vaguely about child psychology but I'm not very good in the science part -- statistics and such. So I looked into the program at the university. And then I read some books on it this summer. And I talked to somebody in the department at the end of the summer, and decided that this is really something that I want to do."

By spring, Pam was having some qualms about her choice:

April, Senior Year. (Have you heard any more about child welfare work?) "A lot of people are very critical of it, which has made me really think about it. I have to defend myself to a lot of people and it is really hard because there are some people who are never going to really understand. If they do understand, they don't want to think about it; they prefer to let you worry about it. There are a lot of people who come up with the old cliches. They say that you are just encouraging people who shouldn't have children in the first place to go ahead and have large families when you give them money and make them feel irresponsible about bringing babies into the world. It has gotten to the point where I'm not numb to this criticism. I realize that you can't just give millions of dollars and think things are going to work out."

Marriage and Family

Pam was no longer in doubt that commitment to husband and family took priority over all other considerations:

(What would be a good life ten years from now?) "I plan to be married. I would like to wait two years before I have children. I only want to have two, and have them three years apart. So, ten years from now, I'd have two young children and I couldn't be working. If I go into child welfare I can get a part-time job because I think I would like to keep working."

"My husband will be working at whatever he wants. He's going to try graduate school and either go into business or go into administration.

"If I have a family, my relation with my future family is going to be the most important thing to me. I know that my husband will be the most important thing to me, maybe even more important than my children."

Change in Aspiration Level

The general readjustment of Pam's aspirations which had begun in her sophomore year (coincident with being pinned to Neil) continued and solidified. Her senior-year conception of her role in life would not now admit even the modest hope of being a future president of a local community organization.

October, Senior Year. "I used to think that the only way a person could really contribute to a problem was to become somebody really important whom a lot of people would listen to at one time. Now I think that if chance, or whatever it is, happens to put you into a position like that, fine. But, actually, in planning what you are going to do, what you hope to accomplish, I don't look at it that way any more. I look at it in terms of a very small area. For instance, if you can prove or set up something, or do something in a very small community, it is just as important as going out and doing or being somebody important."

April, Senior Year. "I don't want to do anything earth shaking. I just don't want to devote that much time to it. I don't want to change the world. I just want to affect one tiny little segment where you can really see some kind of results. I probably will still pass out leaflets for presidential campaigns but so far as being president of any kind of a community organization or something, I'm not interested in that."

Graduate School Plans

Pam still stuck to her plan of going to graduate school and getting a master's degree. But she was also prepared to just go to work at whatever job she could get:

April, Senior Year. (What are your plans for next year?) "If I am not accepted at the Graduate School of Child Welfare, I am going to take a civil service examination and just get a job -- in an agency if I can. Then I would either stick with it, if I like it, or reapply to graduate school.

"Neither Neil nor I have heard from any of the schools that we have applied to for admission. It is unfortunate that I only applied to the School of Child Welfare at the university in my home city because Neil has applied not only to the Graduate School at the university but to a second one as well and ideally he would decide where he would want to go to Graduate School and then I would go there in child welfare. If he went to the other university there would be no way I could go to graduate school there.

"We have also decided that we would like to get married after a year. I would have one more year of graduate school and he would have two. We don't know where we would get the money for that, so we've stopped worrying about that."

Educational Effects

The senior year is a loose-ends, waiting period for many students, but in Pam's case, the cumulative impact of what had happened to her had a debilitating effect upon her senior-year studies:

October, Senior Year. "It's fun. You identify with the class you are in. Socially, it's fun. On the other hand, I have decided what I want to do. And it seems, in a way, this whole year seems kind of a waste in that I'd really like to start doing something. I want to go to a School of Child Welfare and get an M.A. in that. I still enjoy history courses; yet I feel kind of passive about the whole thing. I'd really like to be working for something, and now that I'm not going into Far Eastern History, it seems like the last three years have been a long extended intellectual hobby."

April, Senior Year. (What has the senior year been like?) "First of all, I don't really care about this college any more. I don't really care about being here. In a way this has been a wasted year. I'm not that interested in my classes. I really would have rather gone to graduate school this year. Academically, it has seemed like a wasted year. I wasn't thinking about what I was doing this year."

Looking Back

Pam was aware that momentous things had taken place during her college years. In her reflective moments, she wondered about her life and tried to understand what had happened to her:

(What major mistakes do you think you made in college?) "In a way, I think getting pinned was a mistake...I would advise people not to get pinned. Once you get pinned, if you take it, as I did, as a commitment to getting married, then you are limited. If things get to the point where there are a lot of troubles, if you want fresh air, if you want to look at things objectively, the only way you can do it is by not seeing the other person and by getting close with other people. If you are pinned you have to go through the huge trauma of getting unpinned. I had a tendency to let things slide, simply because it was too much to bring them out. I think this is a mistake."

(What were the rough periods in your college experience?) "The only thing that really stands out was the spring of my junior year, which was a real trauma. I guess it was just looking at myself for the first time. Either my perspective has gotten better or my rationalizations have gotten better. I'm not sure which.

"First of all, my family is an intellectual one. My father, with whom I strongly identify, had this idea that I was to be the one who was really going into politics or be an Assistant Secretary of State. And I was the one who wasn't going to be emotionally involved. I was going to be a doer, an emancipated woman. So I kind of incorporated this. I was going to be an intellectual and I was going to do something really important and he was going to be really proud of me, and if I didn't do it, he wouldn't be proud of me.

"I finally realized that, in the first place, I'm not an intellectual. In the second place, I don't want to be something like that: be Assistant Secretary of State, or be in the President's cabinet, or something like that. And I do want to be a kind of homebody. I think it will be fun. Daddy may look at me with disgust: 'there she goes...into the old rut - count her out!'

"But I realize that I don't really think he's going to be disappointed. In a way he may be, if my brother doesn't turn out to do something terribly important. Daddy always says that the second generation should be better than the first. But I really don't care any more because, if anything, this is his problem and comes from a certain lack of insight on his part. But I had to live with myself; I had to recognize that.

"So then, for the first time, everything that I had planned on, the whole picture that I had of myself, was wiped out. And then I started thinking -- what I really had to care about. And, I don't think I really found out. But at least I think I'm making decisions more on my own."

(When do you think you will really find out?) "I don't know if you ever really find out."

At another point in her final interview, Pam returned to a reflective analysis of her overall development in college:

"I am very close to Daddy in an emotional sense. This is a problem because I can see a lot of faults in Daddy and a lot of things I wouldn't want in my husband. But he really has a powerful hold over things that I do. Sometimes I even wonder if I have a conscience of my own, if it's me talking something that Daddy would be saying. But one thing I've learned: that is not to argue with him. Because the things that he tells me he really believe in, and I'm not going to change. He's a really opinionated man. He's broad-minded in that he will accept other people's point of view, but with me, he really doesn't understand. He thinks I'm just misguided for the moment and I'll come around eventually. I don't argue with him; I still value his advice. I think what he says is important and I really weigh carefully what he says but I don't swallow all of it like I used to. I used to think it was just a written law. I don't know, it's really hard. I feel much younger than I am. The reason why I do, I think, is that, although he has always given me full rein, I always feel a rein, and I think that part of the fact that I feel so young is that I know that the decisions that I make and the things that I do are so highly influenced by him. Mother influences decisions a lot more than she used to. More and more I respect Mother, and we are a lot closer than we used to be. In fact, if Mother ever gives an opinion about something, I think I would listen even more closely; or consider it more valuable. Daddy is always giving advice, but mother rarely says anything. I really think that a lot of the time when he says these things he is not thinking of the context -- in the context at all -- that I'm a woman. And some of the things that he says aren't the things that I want, and Mother understands a lot more the emotions involved. But in a more mature way, I'm even closer to Daddy. Because now I view what he says critically; before there was no questioning at all."

THEORETICAL AND EDUCATIONAL IMPLICATIONS[1]

The kind of detailed biographical studies represented by the cases of Pam and Bob are not popular in personality and educational research. Partly this is because such data gathering is extremely expensive. But more because the value of such data for the exploration of the basis dimensions of a new problem area is not widely appreciated. Personality in college is a very new problem area, and much in need of exploratory studies in depth. This section is meant to show the kind of problems and theoretical ideas that such data can suggest.

The Child Self in Personality Development

Although it is well known that the achievement of independence from parent is a general developmental task of the college-age person, it is not clear just how this is accomplished, nor the effect of the processes involved upon the education and social development of the student. It is hard to escape the impression that, for Bob and Pam, the major single thing that happened in college was the differentiation of themselves from their parents, especially from father, who happened to have had the most formative influence in both cases. If this is true in many cases, what are the personality and educational implications of this?

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[1] This section is a much abbreviated version of certain ideas that are developed in detail in Peter Madison's Personality in College, Preliminary Edition, Volumes I and II. Reading, Massachussetts: Addison-Wesley Publishing Company, 1966.

From a personality standpoint, the phenomenon suggests that one needs to think of the personality of the incoming freshman as including a "child self" as a part of its central structure; a childhood-developed organization of cognitive-emotional-motivational structures that the student brings to college and which, largely without his knowledge, enters into and strongly influences the course of events.

The child self, of course, does not appear as such to the student. It manifests itself as an irresistible pull in a certain direction. For Bob, it appeared as a feeling that he must carry out certain obligations prior to exploring his own interests. For Pam, it seemed to appear both as an attraction to a career in which she might become an influential person, and also as an attraction to Neil, who had enough of her father's qualities to arouse the after-products of that powerful relationship, which then entered in and swept her along.

Nor does the student think of the process of maturing in college as one of differentiating himself from a parent. To him it consists of discovering that he does not really want to do what he earlier felt impelled to do. Bob found, eventually, that what he was so sure he wanted as a freshman was leaving him "cold" by the end of his junior year. Pam found that she could not go on with her Indian Studies and that she didn't want to become a figure of power and influence. She also found that submerging herself in the Neil relation was not what she wanted, even though she was relatively helpless to do anything about it.

Of course, both of these perceptive young people were later able to formulate an understanding of what had been happening to them in verbal terms, and to see what they had thought they wanted as freshmen were things they supposed their parents wanted, and to see that, with all the developments that had taken place in college, they now did not want those things. But such formulations are an afterthought and may even be uncharacteristic of the normal course of events, it may even have come about largely as a consequence of their role as research subjects. Extensive questioning of the kind they underwent twice a year must make a difference in how a person thinks about himself.

So, "differentiation from parent" is, from a personality standpoint, a change in a basic aspect of the person's internal structure, a structure that can reasonably be distinguished in theory not only because it enters in to determine important events in college, but also because, having been formed at a stage of cognitive and emotional immaturity, it may well inject those same qualities of cognitive-emotional immaturity into otherwise reasonably grown-up behavior. Bob's stubborn sticking to his starting plan in the face of so much plain evidence that his interests lay elsewhere or Pam's uncontrollable capitulation in the going steady relation are examples in point.

As to how the change of child self is accomplished, the two cases suggest that it's not just a simple matter of "giving up the child self." Obviously, what is given up is only a component, or a set of components, or the childhood organization. What seems to happen is that the college experience acts to develop certain components of the child self and as these become both stronger and more mature structures, they increasingly come to occupy a central place. When these developments take a course that conflicts with a frequently dominant component, a struggle ensues and, if the new augmented and more mature components are stronger, an aspect of the child self is given up (usually accompanied by depression - these discarded components are very dear to the person.)

In Bob's case, his summer job, his House officership experiences, the stimulatory association with Fred and the diversity of the campus culture, plus real contact with chemical engineering as it actually was (rather than how he had imagined it), led to development of the social, administrative and service-to-people aspect of his child self which had been there all along but subordinate to his "Puritan child self." So one set of components grew in power and displaced a formerly dominant one.

Pam's "political child self," which so much represented her precious childhood relation to a loved and idealized father, received no developmental support in college. The college faculty and Neil might not have actively resisted her implementing this part of herself, but they certainly provided no positive experiences that could have developed it. The campus culture generally, and Pam's circle of girls specifically, were strongly opposed. Her friends found her depression over giving up Bengali puzzling to say the least and all their encouragement was in the opposite direction of developing the feminine component of Pam's child self, which the long relation to Neil must have fostered as well. She subordinated herself to him as mother had to father and practiced the role for three years. Small wonder that the junior year found a new balance of power within Pam and that, by graduation, she was looking forward to trying a "homebody" role.

Even the foregoing way of looking at the matter is oversimplified because the outcome does not consist of "giving up" the "non-fitting" component of the child self, but of integrating it with a new organization in a different way. Thus, while Pam in the heat of the crisis, disclaimed any intention of going to graduate school and was proclaiming the value of a "homebody" role, this is not, in fact, what she did. Instead, in her senior year, she developed a new synthesis which appeared in the form of the intention to go to graduate school in child welfare (which, in fact, she entered). The mother-girl side of her was there, perhaps even dominantly so (it's hard to tell), in the social, helping role, the interest in people, in serving others. But getting a graduate degree, to which she returned as an interest, can also be thought of as a modified father component. And her political child self is not "gone," it is a part of her make up, and may easily become active. She may go into an administrative job within social welfare, even enter local politics to fight for her clientel.

The overall process, then, appears as a one in which the personality components that the student brings to college are developed to different degrees by his college experiences, leading to imbalance, conflict, and forcing a fresh synthesis in which the components stand in a different relation to one another.

The Child Self in Education

From an educational standpoint, changing the child self, as in these two cases, is accomplished in part through the curriculum. The issue over whether to retain the precious components of the child self or to divest oneself of it can be fought out in terms of what to major in, a fact of obvious educational importance. For Pam the issue came to an acute head at the time of the junior-year wedding of Neil's friend. The outcome of the head-on clash between her now-strengthened "feminine" component and her "political child self" led her to abandon Bengali, Indian Studies, and the whole father-associated idea of becoming a Far-Eastern expert. There are several aspects of interest.

It is plain, first, that what is happening on the educational front is hard to understand without knowing what is going on within. As with Pam's friends, the course instructor or the

Dean's office would be puzzled if they looked at events purely from the standpoint of a student deciding to drop a course. Even Pam was unclear about what was happening at the time. She knew, on the one hand, that she was giving up something very precious to her, something she could hardly explain to her socially-oriented friends. But she stressed what could be seen on the surface: the difficulties of the course, her strongly aroused desires about marriage, and the implications she saw in being "a failure in dropping Bengali," in abandoning this "commitment to myself." These were important and relevant facts, and Pam was perceptive to see them as clearly as she did. But it wasn't until her senior year that Pam saw what was happening in a more underlying sense: that she was reorganizing her child self and fitting it into a new whole in which the political child self no longer had the main role.

From a Dean's office standpoint, such shifting around of majors and courses can hardly appear as anything but arbitrary acts of immature students still searching for a "direction." Experienced Deans know, intuitively, that complex things are going on inside, and know, too, that, for the student, these have priority over the formal aspects of the education program. But social science has as yet provided the educator with few ideas that would help their intuition.

More fundamentally, it would seem as though the curriculum should be thought of as a tool that is used for other and, to the student, more important purposes than academic education. He uses the curriculum as a medium for accomplishing developmental ends if the curriculum happens to lend itself to such a purpose. In the case of students with child selves containing strong parent-derived components that conflict with college-developed ones, the student may use the curriculum as a means of re-organizing his personality components and developing a new synthesis that gives a place to the college-augmented components. Once this is accomplished, as in Pam's case, the student may discard the educational program. Bob threw out engineering; Pam found the whole senior year tasteless; a waste.

This is not to say that education doesn't go on during the period when involvement in a program is serving some important developmental end, and a basic residue remains after the involvement ends. But the fact is, serious education only takes place when it serves a developmental purpose. This may be a distressing way for the educator to look upon his programs - as secondary to something else, something that no one has even been able to formulate adequately as yet. On the other hand, we may have here a clue to how to improve education: by consciously exploiting developmental processes - once they are understood.

Educational and Developmental Timetables

Because we have no framework of ideas in terms of which to think about college from a developmental standpoint, we use the chronological one provided by such familiar thought structures as the traditional four-year time span of college. Freshmen are thought of as new and undeveloped and seniors as the finished end product of a four-year cycle. Within this four-year sequence, the underclass years are defined as the time for exploration and settling upon a major and upon the life career to which the college major stands as a preparation.

The cases of Bob and Pam make it clear that individual developmental time tables may be quite different from the one set by the registrar's office for the timing and sequence of events. In the fall of his senior year, Bob was just beginning serious exploration of the curriculum and of his own interests in the way that the educator prescribes should be done in the freshman year. But that same senior year, for Pam, was a year needlessly tacked on to a developmental cycle she regarded as complete at the end of her junior year. Their cases raise an interesting question: what _are_ the usual relationships between the two time tables? Perhaps Pam and Bob are not so atypical; the two sequences may often be related to one another in only the most haphazard way. The four years of college may be just a random intrusion upon a cycle of personal development that is so individual that there is no way of relating the two for material profit. But one can't say without systematic studies of the relationship. Perhaps there are ways of bringing the two together.

Is College the Best Place to Achieve Developmental Changes?

If developmental issues are so primary at this age, one wonders whether college is the best place to deal with certain developmental problems. Should such an expensive educational plant be used, for instance, to help bring about sufficient independence from parents so that the student can proceed on his own? There may be advantages to trying to induce the necessary development by using more effective and less expensive organizations than a university.

One wonders what would have happened if Bob could have followed his own strong drives to explore the world, and his own interests, by spending two years in the Peace Corps before coming to college; or even, as he put it, had he just "bummed around, maybe gone to Europe, or gotten a job for a year or so just to see if I could find something outside that I could come back to." While such proposals on the part of the young are likely to horrify their parents, they spring from the young person's realization, especially when they have been as culturally isolated as Bob was, that the world beyond home and school, the world they will need to live in after college, is different in important ways that they sense but do not know; and their instincts tell them that they need to explore it and find out for themselves before they will be ready to write something meaningful on their college application form in the spaces that ask: "What do you plan to major in? What are your after-college plans?"

It is unlikely that such a period of seemingly aimless exploration would lead Bob into the wayward life his parents seemed so sure he was headed for unless he completed college and had definite vocational training before he should be allowed to "start fooling around." More likely, he would have made much faster headway with the problem of achieving independence from his parents and developing some sense of direction from within. He would have arrived at college more familiar with the new and necessary status of not always being "on top" and readier for effective work among talented equals.

Likewise for Pam. Would a year abroad, or working, or two years spent in the Peace Corps have led to a different educational outcome? She tells us her senior year was wasted. What would have happened had she spent its equivalent in a setting that allowed her to differentiate herself from father before starting college? In her case, the non-college setting should, ideally, have also contained several Neil-like persons and perhaps involved an intense romance or two lived through so that she would have arrived more immune to the appeal of going steady. After all, as a senior, Pam was not uninterested in education even though she wanted no more of the program she was in. She was very anxious to begin education for a career more appropriate to her new self.

Able students are increasingly taking such problems into their own hands by taking "leaves of absence" at points where they realize that they need something college cannot give. Clearly it is time for colleges to experiment more with educational and developmental sequences.

Crises and Depression

Our usual attitude towards crises is that we should calm them down when we find a person in one. The urge to ease the other's pain becomes imperative. And if we know of an impending crisis, the tendency is to head it off on the assumption that emotional pain is a bad thing. As Pam and Bob show us, pain can simply be symptomatic of development. Crises can be good things. One might even suggest that a college experience that does not have a good share of crises has probably not produced much that is worthwhile.

Depression, too, is interesting. One wonders if it isn't a sign that a central aspect of the self is threatened, or is having to be subordinated to a newly-developed component and the whole re-organized. Its appearance in college-age youngsters may signify growth more often than it signifies the kind of mental pathology with which we usually associate depression.

Transference Relationships in College

As Freud said, transference is not peculiar to the psychotherapeutic relationship, the special conditions of which simply isolate the phenomenon in a clearer way. The essence of the idea, short of certain peculiarities of theory that Freud embossed upon the core notion, is that a strongly-developed childhood relation to another person (normally a parent) leaves an after-product of potential emotional responses and associated ego mechanisms that may be aroused by a later person who shares some of the characteristics of the figure to whom the person was attached as a child. A strong arousal of such a childhood aftermath by a person in the college setting is a "transference relation." The transference person may be a teacher, a friend, a member of the opposite sex. A transference relation is characterized, to varying degrees, by misperceptions of the other person (overestimations, normally), a feeling of being helplessly swept up in the relation, and by the appearance of a pattern of feelings and coping mechanisms that were characteristic of the earlier relationship. The transferred pattern is blended with real perceptions so that the total view of the other is a fusion of "real" and "transferred" characteristics. As the relation between Bob and Fred shows, a part of the responsiveness may be due to the transference figure possessing opposite qualities from the childhood figure: Fred was "wild," Bob's father was not. But the interest in "wildness" is directly linked to the childhood relation. In college Fred touched off "wildness" as well as "domination by a superior", and became, to some degree, a transference figure for Bob.

A figure toward whom one is powerfully drawn but who also is very different from oneself in many ways (Fred could criticize authority, for instance), becomes a powerful development agent, as Fred was in Bob's case.

Of course, when a transference relation gets touched off by a member of the opposite sex, the result is "love." The Pam-Neil going-steady relation was just such a transference relation, although this supposition must rest largely on inference because of the thinness of the data on the point. Such an hypothesis would at least explain why Pam was so swept up in and helpless to control the Neil relation.

A girl who has had a strong father relation and who has also dated so little that she has never had a chance to live through a series of transference relations as a teenager, comes to college "loaded" with powerful father traces ready to be touched off by a spark. The "spark" need not have been Neil. One wonders what would have happened if Pam had not met Neil but had been allowed to develop a close relation to Professor Owen, whom she so admired ("I think I would like to be like Professor Owen in that I would like to have...Well, I never could, because he is the kind of man who was in China in the Second World War and he formulated a lot of American policy...I think I would like to be like this.")

And what if Professor Owen had encouraged her interest, started her to working with him on international policy matters, perhaps gotten her a summer job where she had a chance to see his kind of life in action? And suppose he had started her to working on language earlier, and that she had spent that lonely summer in India with a government political science team in which she was allowed to have an apprentice relation to the group. And what if, with such a relation to him established, Professor Owen had talked to Pam at the time of the crisis and supported her against the otherwise irresistible power of her marriage wishes which were so stirred by the wedding? Could her political child self have been fused with a world of constructive, satisfying work instead of lopped off in the interests of a secure relation to a boy?

One can't tell of course. But it has happened in other cases. Would it have been a good thing? Again, one can't say. But it was what Pam most wanted when she came to college, and what she hoped would somehow happen - until the Neil relation and the college smothered that part of her.

Educating Women for Leadership

Thoughtful citizens sometimes worry about why there are not more women in leadership roles in society. It will hardly be lost on the reader that over the four years of college, Pam developed in ways that would fit her more comfortably into the traditional role of a suburban wife. It is true that she gained a healthy measure of differentiation from her father, which in itself was a very good thing. And she did not give up her graduate school plans. Child welfare work represents a combination of a career (father aspect) in which the helping, mother side of her personality had a place, a good integration of her bi-modal personality tendencies. One cannot say either that Pam's statement that she no longer wished even to be president of the local chapter of a community organization represents the end of her earlier wish for a position of influence. She may become an influential person in the city or county welfare organization.

But on the surface, at least, the college did very little to take up and develop the potential Pam came with. Pam's case is telling us that just bringing bright and ambitious girls into connection with a fine college is not enough. Powerful forces are at work in society that shape a different course for the girl. By the time she arrives as a freshman, these shaping forces have already become so much a part of the girl's personality structure that she only passively resists the forces that push her in the traditional directions. The college is as much, or more, a part of these shaping forces as is the rest of the society. Good applicants plus a good college aren't enough. If we are serious about turning out more women with leadership aspirations, something different is called for in the college girl's life. Perhaps it is worth experimenting with such a simple thing as teaching the Professor Owenses more about personality, and how to respond to such a girl as Pam so as to let her "unload" on him instead of a boy who chances to share enough father qualities to touch off Pam's child self. Of course, just "unloading" is not enough. As wise teachers know, a transference relation offers a truly unusual opportunity to turn the power of the student's motives into constructive educational development so that when the tide of feeling is worked through, the student is left far ahead of any attainment he would have dreamed possible.

Not that the transference on to Neil was wasted, developmentally speaking, but one can't help but wonder how much further Pam would have gone in implementing the ambitions she came with had Professor Owen known how to tap her great power reservoirs in the service of her own development.

Identification, Identity and Non-Being

Some personality theorists who work with a general psychoanalytic frame of reference would not hesitate to say that Pam's failure to take any other course through college than she did is easily understandable if one simply assumes that she was "identified" with her mother and this led her to make the standard female response at each decision point. They simply would not take Pam's freshman protestations that she wanted to be the first women Assistant Secretary of State seriously: it was just her feminine way of pleasing father and continuing to be his favorite girl.

Some recent psychoanalytic formulations have loosened the relationship between a person's "identity" and the view that the critical identification was the one formed at the time of the Oedipus complex and its influence upon the child's identification, and these have led theorists, like Erik H. Erikson,[2] to new formulations of their own.

The concept of "identity" is still a vaguely conceived set of ideas about what is probably the most important single topic in human psychology: the fact that persons come to act as though certain features of themselves and their situation are extremely special. In ways that they often cannot say and may have little awareness of, the person acts and sometimes consciously feels as though these special features of self, or surround, represent him; are him.

The vagueness of the identity concept is not due to any lack of theoretical capacity on the part of those who have grappled with the topic, quite the reverse. It is a particularly intangible set of phenomena that is being dealt with. The facts are as shadowy as they are important. A satisfactory theory of identification and identity would advance psychology more than any dozen other achievements one could name. It is unlikely anyone can develop a very good theory as yet, but the problem should be constantly in mind.

Consider Pam. In her successive decision situations, she did act as though certain things must be preserved at all costs. As a freshman, a part of her knew it was a mistake to go steady and commit herself to Neil if she wanted a career. But another part of her preferred to commit herself when faced with a choice. When she found the going tough in Bengali and this difficult period coincided with a friend's wedding, her feelings pulled her toward marriage and precipitated a crisis. In her childhood period, whenever father took a definite stand on anything, she felt that whatever was "her" (her identity) belonged to a position whose role was to give in (as in the dinner table episode she related). Similarly in her relationships to Neil.

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[2] Erikson, Erik H. Childhood and Society. New York: W.W. Norton, 1950

To say that "her basic identity is that of a woman," only names this problem, but one must at least recognize that something important is involved and a name helps talk about it. It is a fact that her every major decision, when she was forced to choose, was consistent with the general idea that Pam's identity was fundamentally that of the traditional role of a woman in contemporary society, and any educator who wants to persuade more talented women to take an active role at high levels of society must cope with these inner representations of self that the girl brings to college.

Of course, Pam's "identity" is probably not all that simple; it is unlikely that anyone's is. When she says that she took over her father's wishes for her to be someone great in public life, she may have just been catering to his wishes, as she herself at times seems to feel. But, if so, this is not all. One does not react with acute anxiety and depression, as Pam did when she gave up Bengali, nor return to the topic so persistently over the years as she did (she called it a "trauma" at graduation...indeed it was) if one is giving up a surface part of one's self. Her saying, at graduation, that "the whole picture that I had of myself was wiped out" in the junior-year crisis is closer to the truth. Pam's more usual statement on the matter put it in terms of her simply having become more independent of her father so that she could now disown her former ambition and feel that it was simply an act of maturity on her part. Pam is right in seeing her decision as an indication of her growing independence. But this truth tends to mix her up about how vital the ambitions she gave up were to her. The evidence is clear that she gave up a valued part of herself.

But why does the girl so much look to relations with boys and to marriage for security? And why do boys look more to careers and achievement for a similar security (not that they don't look to girls and marriage for security too, but there is difference in emphasis on the boy-girl relation as the primary security).

The concepts of "identity" and of "non-being" are interesting suggestions about why boys and marriage are seized upon as sources of security for the girl. The supposition is that, at some point in life not yet identified as to time, and by processes that can as yet only be guessed at, a conception of what one is, and where one belongs in the scheme of things, develops. In some way, a male infant comes to perceive himself as "a boy" and a female as "a girl." That this is learned is attested to by the occasional instance in which the process goes awry and the child comes to feel more basically kin to the opposite sex than to his own. It is a telling fact that this often happens in families in which a parent of the child's own sex is missing for some reason, or when the dominant parent has looked forward to the birth of a child of a particular sex differing from the sex of the child they got, and tends to treat the child accordingly (usually without awareness that he is so doing) in disregard of the child's biological sex, or when the dominant parent is simply so impressive to the children of the family that they all use him as a model for themselves.

"Identity" is a conception of oneself as being a certain kind of human being and having a particular place in the social surround. It is a highly emotional concept in the sense that it tends to have powerful motivational properties. Apparently, at least for persons reared in our particular culture, a "sense of identity" is a fundamental condition for feeling secure. "Non-being," not having a sense of identity, is peculiarly disquieting and panicky. It arouses strong feelings of being exposed, vulnerable, endangered, feelings akin to the threat of death. The void of "non-existence" is particularly intolerable to the western man.

Possibly here is where these clinical concepts and the cases like Pam's and Bob's link up. Certainly Pam acted as though not having a boy was some kind of fundamental threat - perhaps to her basic sense of identity. By the time she arrived at college this subtle quality of feeling and thought known as a "sense of identity" had quietly, and to a degree unsuspected by Pam, settled itself around "being a married women, being close to and loved by a man" as a central feature of her existence. To threaten it was to arouse the nameless dread of "non-being." If so, we have put our finger on the most important influence that corrodes the college girl's attempt to travel along the career road: she has to first secure herself by implementing the dominant identity she has developed by the time she gets to college. This leads her to give first place to the boy relation and waters down her motivation so that she cannot carry through with the grinding work of serious career preparation. The boy's identity (in our culture) leads him to feel the dreaded sense of non-being when he is not putting his main effort into career work.

The Problem of the Small-Town Success in the Large, Cosmopolitan, Highly Selective University

Bob's college career should be of great interest to admissions officers of the country's élite institutions. In some senses, he was a great success at the college he attended. But it is far from clear that it was all for the best.

Bob's state of mind at graduation should make any educator who talks about "liberating" the student pause.

(How do you feel about yourself in terms of, how shall we say, relative maturity? What are your feelings about your own development in college, and the state you're in now...) (LAUGHS) "Well, I don't know, probably to sum it up I'd say when I first came I had a single purpose in mind, and now I have lost all purpose entirely. (LAUGHS) Well, that's an oversimplification, of course, but..." (PAUSE)

(It got more complicated) "Yes, that's it in a nutshell. (PAUSE) What I've learned and what I've seen and done over the past four years have all just led to a state where I don't really know what I want." (PAUSE)

(Are you that uncertain?) "Yes, I think so. I don't really know for sure what I want. I can sit down every other week and mark down a new goal and still notbbe any more sure of which way I want to go."

(Has there been any change in the rules or principles by which you guide your conduct?) "I suppose I have less rules now than I did when I came in. Pretty 'hang loose'."

(More casual? When do you find it difficult to live up to your own standards?) "I think that is one of my problems. My standards haven't really gotten definite, so it is pretty hard to say. I don't know, it just seems that even the basic standards of decency, i.e., be good to your fellow men, that's about the only real standard I have: to try to be a nice guy and not hurt anyone else, and yet be as independent as I possibly can."

Taken at his word, Bob seems to have graduated without values or purpose. Was this a satisfactory outcome for one of the country's choicest high school graduates (he was much sought after by the most selective colleges) spending four years at one of the best institutions in the country?

One can't help wondering whether Bob was ready for a college with such sophisticated, over-talented students. Had he gone to his home state university he would undoubtedly have done very well in his studies and have been able to carry them easily; he would have made the track team, and still had time for social life, politics, and exploration of the curriculum and of his own interests. He would not have had the basic supports for his identity knocked out and his development would not have been delayed by the resulting protective response that followed upon the identity shocks. He would have had similar difficulties in establishing his independence, but this is easier to do if one is not, at the same time, engaged in a desperate fight to maintain a sense of identity by an exaggerated clinging to what he supposed his parents wanted of him.

On the other hand, he would not have come to grips with the great problem of the talented and successful young person: learning to work effectively and comfortably among equals and superiors -- which all but a few at the top eventually must learn as they move up the talent pyramid. Nor would he have learned as much about the diversity of personalities in a more homogeneous population; he probably would not have had a Negro for a friend, or a Turk from Nigeria for a roommate - nor even a Fred, who did so much to educate him.

Then, too, how does one know that a massive identification shock at this age, in a normal person, is a bad thing for long range personality development? Having once "trapped" himself so effectively by his constrained response, perhaps Bob stands in less danger of sealing himself in at a more critical point in later life.

And who is to know whether graduating "dissolved" is a regrettable state for a young man of Bob's age? Perhaps as the research staff follows Bob after graduation, they will find that arriving in such a state at graduation, school or a job makes one more educable, more able to respond effectively to the situation one finds rather in terms of a plan for living that has been hardened too soon.

Chapter V

STUDENT DIFFERENCES IN THE RESPONSE TO THE CURRICULUM: THE OPEN, THE STRAIGHT, AND THE NARROW

Harold A. Korn, Ph.D.

Individual Differences in Student Needs

There is a lack of clarity about the goals of higher education. Professors, college presidents, and state legislators find they have little in common when it comes to defining what the undergraduate years should mean. This lack of agreement among such a diverse group produces no real alarm in a society which takes pluralism as a valued fact of life. When professors seriously disagree among themselves about the goals of undergraduate education, we see this as a healthy example of an essential dialogue.

What is too often missing from any discussion of goals is the fact that students have their own diverse goals and aspirations. Even in those rare institutions where curriculum and philosophy of education are clearly integrated, there is still disregard for the varied agendas of the students. In the more typical college, the situation is further compounded with the diversity of goals existing among the faculty. The varied courses in the curriculum are not integrated in such a way as to encourage intellectual development. Instead, it is the piecing together of what numerous specialists feel is vital to understanding their own discipline. Even under the best of these currently existing conditions the prospect of the undergraduate curricula forming a set of integrating experiences for the student exists only as a promise in the college catalogue.

In this chapter we wish to explore one aspect of this complex issue. We will describe the ways in which students differ in their reactions to the curriculum. From this perspective of students' differences, the goals of higher education can then be discussed more realistically. Both college students and the people who study college students agree that there are different types of student. This common sense establishment of types is based on the recurring patterns of individual differences that we observe in people. When we observe a pattern often enough, the next time we see a portion of it we expect the rest of the pattern to emerge.

The obvious danger of such thinking is the creation of stereotypes. Yet we all need the efficiency and the insight-potential of meaningful classifications. We need a conceptual schema which will permit us to understand the differences between students and thus allow us to be more effective in teaching them all. Our task is to select a basis for classifying students which has the conceptual richness to raise it above the commonplace. At the same time we have to examine the validity of our schema to avoid the danger of finding only what we expect to find. The minimal goal of this chapter is to describe some of the ways students differ in their reaction to the curriculum. The larger goal of the chapter is to work toward the development of a meaningful classificiation of student orientations to the curriculum so that college teaching can eventually be made more meaningful to more students. The argument that we will return to in the discussion centers on the wastefulness of teaching all students in the same way. It is wasteful of the teacher's effort, and it is wasteful of the student's potential.

We will take as our starting point what students are willing to report about themselves on a questionnaire. We are asking them to classify themselves after which we will examine the pattern of individual differences which is correlated with this self-classification. Self-description is replete with many distortions and other sources of error, but it does have the advantage of telling us something of how students see things. As we progress in our effort to build a meaningful classification system, we will use some of the more objective tools of statistics to determine how congruent the phenomenological classification is with a classification based on other kinds of data.

Method

Among all the men and women who were freshmen in our Student Development Study at Stanford and Berkeley and who were registered early in 1965, approximately 60% filled out a senior questionnaire. These four groups provide the samples for our study of student types. Their responses to one of the questions in this questionnaire will provide the initial basis for our classification. For each of these four groups, a wide variety of other data is available and we will be able to examine the corollaries of this classification schema.

Results

The advantage of having several different groups on which to check our findings carries with it the burden of wading through a very large amount of data. An overview of what is to come will provide the reader with a guide for the maze of tables that follow. Our initial classification was based on the students' responses to a Senior Questionnaire item. Our first table contains the frequencies of response for our four groups. In all the succeeding tables each of the four groups (Stanford men, Stanford women, Berkeley men and Berkeley women) will be handled separately. For each of these four groups we will have a three-fold classification system that reflects the student's attitude toward the curriculum (A: getting good grades; B: useful in career; C: intellectual interest). Our emphasis will be upon examining the psychological and behavioral characteristics which are associated with being placed in one of the three classes. We will look at the cumulative grade point averages, the Scholastic Aptitude Test scores, and the scores on several scales of the Omnibus Personality Inventory. After this overall presentation of results, we will select the Stanford men for even more detailed analysis.

In Table 1 we have summarized the frequencies of students' responses to the following question: "In general, when you consider most of the courses you have taken, how would you rank all the following in their order of importance to you?" Although there were six categories, we are only interested in those individuals who ranked a given category as number one. Therefore, Table 1 contains the frequencies for all those students who ranked the category as first in importance. For each student, only one category can be ranked first.

Table 1

Frequency of Responses to the Questionnaire Items Used as a Basis of Classification

Stanford				Questionnaire Item	Berkeley			
Men		Women			Men		Women	
f	%	f	%		f	%	f	%
49	18	9	4	A. Getting good grades	62	24	31	12
70	26	35	17	B. Useful for your career	92	35	55	22
144	53	162	76	C. Intellectual interest	100	38	153	61
1	1	2	1	D. Getting to know professor in class	3	1	4	2
1	1	2	1	E. Getting to know professor outside class	0	0	1	1
3	1	3	1	F. Getting recognition from professor	4	2	1	1
278		218			261		245	

We have used groups A, B, and C as the initial basis for our classification schema because these three groups had adequate numbers of students represented in each category. In light of all the recent discussion about a sense of community on campus, it is of interest to note that categories D, E and F account for under 5% of the first ranked categories. For many reasons, students do not turn to the faculty for meaningful personal or intellectual associations.

When we examine Table 1 in greater detail, several comparisons emerge which will be of significance later. As might be expected, more men than women indicate that their course work is of importance to their careers. Also in the anticipated direction is the finding that more women indicate the importance of intellectual interest in their evaluation of course work. This finding is expected in the same way we would expect more women to express an interest in the arts and cultural events. When we consider differences between Stanford and Berkeley, we see that a larger percentage of Berkeley students are more career and grade oriented.

As we indicated earlier, the reasons why a student would rank one category higher than another are very complex. Yet it is a fact that students do differ in this respect and we have taken this as a starting point for building a classification scheme.

Our long-range goal is the development of a typology which will carry with it information relevant to the process of teaching and learning. Given the above phenomenologically-based classification, we can now move to another level of analysis and see whether the typology also has meaning in this new context. For each of these four samples of students, we have scores on six OPI scales. The students took this inventory both as entering freshmen and as graduating seniors.

One of the principal statistical tools used in the analysis of these data is the discriminant analysis. This multivariate statistical technique is well suited to our needs, for it was developed by R. A. Fisher to answer questions about the existence of class membership among a group of individuals. We started with a classification based on self description, and we want to test the meaningfulness of this classification for other realms of data. In this instance, we will consider scores on the Omnibus Personality Inventory. The discriminant analysis takes into account the variability of group means (Groups A, B, C) on the n variables (six OPI scales), variation of individuals about group means on the n variables, and the inter-relationships of the n variables.

For each of our four groups we have both freshman and senior test results. Therefore, we have eight separate discriminant analyses to consider. In Tables 2 to 17 we have the standard score means for three classes (A, B, C) for each of the four separate groups (men and women, Stanford and Berkeley). We also have the classification matrix for each of the eight analyses. If our variables allowed for perfect discrimination, all the cases would appear in the diagonal row of the classification matrix. While the overall level of significance tells us whether or not we can have confidence in our findings, the classification table tells us how practical our findings would be in actually classifying individuals.

For each of the eight analyses (four groups, freshman and senior) we have found the students within the three classes (A, B, and C) to be significantly different from each other.

It is of some interest to keep in mind the differences in time when the first OPI was given and when the Senior Questionnaire was administered. Our classification is based on students' responses when they were seniors. Yet we have found that this classification based on self description has produced meaningful differences among these students on the basis of the way they responded to the freshman OPI. We could speculate that these psychological characteristics would be predictive of these attitudes toward the curriculum.

For all four freshman groups, the SM score is highest for those choosing Intellectual Interest. All but one of the freshman groups also have the developmental status scale highest for those choosing Intellectual Interest. (The exception is the Stanford women and they appear to be atypical in many respects.)

Not only do we find that the four freshman groups have these consistent differences, but the same pattern of relationship holds for the results of the senior testing. For all four senior groups, the SM scale is highest for those choosing intellectual interest. Again, all but the Stanford women have the DS scale highest for those choosing intellectual interest. While these same relative positions were maintained for the SM and DS scales, there was also a general shift upward in the standard scores on SM and DS for all four groups.

There is a paradox here because on the one hand we see evidence that the absolute scores of SM and DS do seem associated with the different classes we have described. On the other hand, all three classes have significant increases in their scores. The paradox is that the mean SM score for the freshman intellectual interest group is practically identical with the mean SM score of the senior grade group. We will return to this point in the discussion.

While we have found an impressive array of consistent differences, there is also evidence of much heterogeneity within the groups and across the groups. One way of quickly ascertaining the extent of this heterogeneity is to examine the classification tables. Here we see evidence that, although large numbers of students within a single class are alike on the OPI variables, still others are more like students in one of the other classes. For example, some students who placed themselves in the "intellectual interest" group on the senior questionnaire had OPI scores more similar to the "career" group than other members of "intellectual interest" groups. They will not appear, therefore, in the diagonal column of our classification matrix. The "function group" is the "ideal" classification based on the statistical analysis while the other grouping is based on our empirical grouping.

We will now briefly mention some of the results for the other OPI scales. When we consider the IE scale, we see that it is highest for the intellectual interest group for Stanford men, but this does not hold up for the Berkeley men. The magnitude of change is also far less between freshman and senior year for the IE than we saw for the SM and DS scales. Similar complexities and inconsistencies exist for the other scales.

We have, therefore, a situation where we have evidence to suggest that the phenomenologically-based classification system has some reality in the context of personality scales. At the same time we have a good deal of evidence which suggests that these types are far from pure and that they differ from sample to sample.

Table 2

Freshman Mean Scores in Six OPI Scales for Stanford Men

	Grades (N=41)	Career (N=59)	Intellectual Interest (N=130)
SM (Social Maturity)	44	48	53
IE (Impulse Expression)	47	46	49
SF (Schizoid Functioning)	48	49	50
MF (Masculinity-Femininity)	51	52	48
Es (Estheticism)	45	48	52
DS (Developmental Status)	46	48	51

Generalized Mahalanobis D^2 37. with 12 degrees of freedom = .001

Table 3

Classification Matrix for Stanford Men on Six Freshman OPI Scales

Function Group	1	2	3	Total
Grades	26	4	11	41
Career	19	19	21	59
Intellectual Interest	33	30	67	130

Table 4

Senior Mean Scores in Six OPI Scales for Stanford Men

	Grades (N=28)	Career (N=43)	Intellectual Interest (N=76)
SM	52	54	62
IE	48	50	52
SF	46	46	45
MF	49	50	48
Es	47	48	56
DS	54	56	61

Generalized Mahalanobis D^2 of 41.3 with 12 degrees of freedom = .001

Table 5

Classification Matrix for Stanford Men on Six Senior OPI Scales

Function Gtoup	1	2	3	Total
Grades	17	6	5	28
Career	15	16	12	43
Intellectual Interest	11	13	52	76

Table 6

Freshman Mean Scores on Six OPI Scales for Berkeley Men

	Grades (N=62)	Career (N=85)	Intellectual Interest (N=97)
SM	48	46	55
IE	51	47	52
SF	52	49	51
MF	51	51	47
Es	48	47	55
DS	50	46	53

Generalized Mahalanobis D^2 63.12 with 12 degrees of freedom = .001

Table 7

Classification Matrix for Berkeley Men on Six Freshman OPI Scales

Function	1	2	3	Total
Grades	24	20	18	62
Career	27	38	20	85
Intellectual Interest	18	23	56	97

Table 8

Senior Mean Scores on Six OPI Scales for Berkeley Men

	Grades (N=63)	Career (N=85)	Intellectual Interest (N=97)
SM	54	53	62
IE	55	48	54
SF	51	44	46
MF	49	49	45
Es	49	47	57
DS	58	54	60

Generalized Mahalanobis D^2 of 28.63 with 12 degrees of freedom = .001

Table 9

Classification Matrix for Berkeley Men on Six Senior OPI Scales

Function Group	1	2	3	Total
Grades	17	6	5	28
Career	15	16	12	43
Intellectual Interest	11	13	52	76

Table 10

Freshmen Mean Scores on Six OPI Scales for Stanford Women

	Grades (N=7)	Career (N=31)	Intellectual Interest (N=155)
SM	48	46	50
IE	57	49	50
SF	54	52	50
MF	53	51	49
Es	45	48	50
DS	56	46	50

Generalized Mahalanobis D^2 of 21.08 with 12 degrees of freedom = .05

5

Table 11

Classification Matrix for Stanford Women on Six Freshman OPI Scales

Function Group	1	2	3	Total
Grades	7	0	0	7
Career	5	15	11	31
Intellectual Interest	32	45	78	155

Table 12

Senior Mean Scores on Six OPI Scales for Stanford Women

	Grades (N=8)	Career (N=23)	Intellectual Interest (N=98)
SM	55	52	59
IE	54	51	55
SF	46	46	46
MF	50	51	47
Es	46	48	53
DS	64	55	62

Generalized Mahalanobis D^2 of 25.9 with 12 degrees of freedom = .02

Table 13

Classification Matrix for Stanford Women on Six Senior OPI Scales

Function Group	1	2	3	Total
Grades	4	2	2	8
Career	4	14	5	23
Intellectual Interest	21	25	52	98

Table 14

Freshman Mean Scores on Six OPI Scales for Berkeley Women

	Grades (N=8)	Career (N=23)	Intellectual Interest (N=146)
SM	46	46	53
IE	50	46	49
SF	51	47	49
MF	50	53	49
Es	45	45	52
DS	49	46	51

Generalized Mahalanobis D^2 = 48 with 12 degrees of freedom = .001

Table 15

Classification Matrix for Berkeley Women on Six Freshman OPI Scales

Function Group	1	2	3	Total
Grades	20	4	10	34
Career	13	26	13	52
Intellectual Interest	33	24	89	146

Table 16

Senior Mean Scores on Six OPI Scales for Berkeley Women

	Grades (N=34)	Career (N=51)	Intellectual Interest (N=146)
SM	55	54	61
IE	52	48	53
SF	46	44	47
MF	47	51	48
Es	48	47	55
DS	58	55	61

Generalized Mahalanobis D^2 = 47 with 12 degrees of freedom = .001

Table 17

Classification Matrix for Berkeley Women on Six Senior OPI Scales

Function Group	1	2	3	Total
Grades	15	9	10	34
Career	12	25	14	51
Intellectual Interest	29	32	85	146

Another approach to the meaningfulness of this classification system is to examine some other realm of behavior and determine how the different classes of students perform. We have data on the cumulative grade point average and on the Scholastic Aptitude Tests for our students.

For each of our four samples we can determine whether there are differences in the mean cumulative GPA, mean verbal aptitude score, and mean mathematical aptitude score. Tables 18 to 25 contain the relevant information for these variables for these four groups. When we examined the personality realm corresponding to our classification system we found consistent differences across our four samples. This is not the case with this set of variables.

In Table 18 we find that for the Stanford men the career group has significantly lower GPA's than either the grade or intellectual interest groups. For the Stanford women and the Berkeley men and women we do not find significant differences in GPA among the members of the different classes. (Tables 19-21). This is further evidence for the psychological complexity of the "GPA" and points up the need to search for the reasons why students achieve certain grades.

When we examine the verbal aptitude score we find some interesting differences. In Table 22 we see that for the Stanford men the grade group have significantly lower scores than the intellectual interest group. Yet we have just observed that the grade groups had the highest cumulative GPA. It should also be noted that there are no significant differences for math aptitude among these groups of Stanford men.

The Berkeley-women group is the only other one showing differences among the three classes on aptitude variables. Here we find the women who ranked intellectual interest first having the highest verbal aptitude score. Those who ranked career first had the highest math aptitude scores. We noted above that there were no significant differences in the Cumulative GPA for the Berkeley women, although the intellectual interest group did have the highest GPA.

Table 18

Means, Standard Deviation, and t-Test for Cumulative GPA (Stanford Men)

	N	$\bar{X}$	S.D.	t-test		
				A	B	C
A. Getting good grades	28	3.00	.50		2.99**	1.00
B. Useful for your career						3.09**
C. Intellectual Interest						

** Significant at the .01 level

Table 19

Means, Standard Deviation for Cumulative GPA (Berkeley Males)

	N	$\bar{X}$	S.D.
A. Getting good grades	61	2.78	.48
B. Useful for your career	92	2.72	.49
C. Intellectual interest	99	2.68	.44

NOTE: All pairs were examined and no significant differences were found.

Table 20

Means, Standard Deviation for Cumulative GPA (Stanford Women)

	N	$\bar{X}$	S.D.
A. Getting good grades	6	2.98	.39
B. Useful for your career	28	2.97	.36
C. Intellectual interest	130	2.95	.41

NOTE: All pairs were examined and no significant differences were found.

Table 21

Means, Standard Deviation for Cumulative GPA
(Berkeley Women)

	N	$\bar{X}$	S.D.
A. Getting good grades	31	2.66	.37
B. Useful for your career	51	2.67	.35
C. Intellectual interest	130	2.74	.38

NOTE: All pairs were examined and no significant differences were found.

Table 22

SAT Aptitude Scores for Stanford Men: Means, Standard Deviations, and Differences

	N	Verbal $\bar{X}$	Verbal S.D.	t Tests		
				A	B	C
A. Grades	28	606	74	x	x	3.50**
B. Career	42	613	72		x	3.23**
C. Intellectual interest	76	644	62			x

		Math $\bar{X}$	Math S.D.	t Tests		
				A	B	C
A. Grades	28	654	79	x	x	x
B. Career	43	662	69		x	x
C. Intellectual interest	76	672	72			x

** Significant at the .01 level

Table 23

SAT Aptitude Scores for Berkeley Men: Means, Standard Deviation, and Differences

	N	Verbal $\bar{X}$	Verbal S.D.	Math $\bar{X}$	Math S.D.
A. Grades	44	542	91	558	84
B. Career	69	558	84	626	81
C. Intellectual interest	60	573	91	603	110

NOTE: All pairs were examined and no significant differences were found.

Table 24

SAT Aptitude Scores for Stanford Women
Means, Standard Deviations, and Differences

	N	Verbal $\bar{X}$	Verbal S.D.	Math $\bar{X}$	Math S.D.
A. Grades	8	681	64	613	79
B. Career	35	642	61	632	70
C. Intellectual interest	160	670	61	632	81

Table 25

SAT Aptitude Scores for Berkeley Women
Means, Standard Deviations, and Differences

	N	Verbal $\bar{X}$	Verbal S.D.	t-Tests		
				A	B	C
A. Grades	22	574	101	x	x	x
B. Career	46	534	85		x	2.99**
C. Intellectual interest	112	589	94			x

		Math $\bar{X}$	Math S.D.	t-Tests		
				A	B	C
A. Grades	22	504	78	x	2.75**	2.29*
B. Career	46	564	87		x	x
C. Intellectual interest	112	553	92			x

* Significant at the .05 level
** Significant at the .01 level

Among our four groups, the Stanford men not only have the personality scales consistent with the classification system, but they also have consistent GPA's and verbal aptitude scores. We have decided to examine this group in somewhat greater detail with the hope of achieving further understanding of what is involved in the classification schema. The data to be added here will be additional personality scale scores, an analysis of the undergraduate majors these men have selected, and an examination of some of the items comprising the SM scale.

Table 26

Freshman Mean Scores in 18 OPI Scales for Stanford Women

	DO	CS	SY	SP	SA	WB	RE	SO	SC	TO	GI	CM	AC	AI	PY	FX	FE
Grades (N=30)	53	52	51	53	59	45	47	52	43	48	45	47	49	55	53	51	50
Career (N=60)	56	56	54	57	61	51	53	54	46	52	48	52	53	59	55	54	49
Intellectual Interest (N=142)	56	56	52	56	60	49	53	52	46	52	48	49	51	59	56	58	52

Generalized Mahalanobis D^2 = 57.7 with 36 degrees of freedom = .001

Table 27

Classification Matrix for Stanford Men on 18 Freshman OPI Scales

Function Group	1	2	3	Total
Grades	18	7	5	30
Career	11	35	14	60
Intellectual Interest	25	40	77	142

Along with the OPI, the freshmen at Stanford were also given the California Psychological Inventory. In Table 26 we have the results of the discriminant analysis for our three classes. There are significant differences between these classes and the results are in the direction we would expect from those of the OPI analysis. What emerges from this analysis is evidence of the relative discomfort that the grade group has in interpersonal relationships. They have lower scores than the other two groups on all scales of the first quadrant. In contrast, the career group appear quite comfortable with themselves, quite accepting of contemporary social mores, and interested in seeking out interpersonal relationships. The intellectual interest group has the highest scores of the three groups on the flexibility and femininity scales.

The CPI data enlarge our conceptual picture of what these three groups are like. Another way in which we can think about them involves their career plans. We have information regarding their graduating major and we compared this with our classification scheme. (Only those majors which had nine or more students were chosen.) In Table 28 we have the chi-square matrix with both the observed and expected frequencies. The chi-square was significant at the .001 level and reveals some interesting patterns.

Table 28

Cross Tabulation of Selected Majors by the Three Way Classification

	Grades		Career		Intellectual Interest		
	Obs.	Exp.	Obs.	Exp.	Obs.	Exp.	Total
Engineering	11	6.7	16	9.87	8	18.4	35
Mathematics	0	2.10	2	3.1	9	5.8	11
Chemistry	1	1.72	4	2.54	4	4.7	9
Biology	5	2.87	4	4.2	6	7.9	15
Economics	5	5.17	9	7.6	13	14.2	27
Political Science	8	5.74	10	8.5	12	15.8	30
History	4	7.66	5	11.3	31	21.1	40
Psychology	2	4.02	3	5.9	16	11.1	21
							188

$X^2 = 36.07$ .001

As might be expected the engineering students are under-represented in the intellectual interest group, while the history majors are very much over-represented. Even though some of our expectations are confirmed, there are also a number of surprises. For every major except mathematics, (N=11), there are some students who say grades are the most important thing to them. And for every major represented here, there are some students who indicate the courses were important for their careers.

As we move from one perspective to another according to the data being examined, we find that our typology is both supported and challenged. There is evidence that increases our understanding of these groups and other evidence that only raises more questions. The last data set to which we will turn in this section once again takes us in these two opposing directions. Here we are interested in looking at some of the items from the SM scale.

The SM scale provides us with the most powerful and consistent differences across our several groups. Fifteen items are presented in Tables 29 to 31 to illustrate the range of the item content and also to describe some of the shifts in frequency of response between the freshman and senior year. For each item we have the frequency of true and false responses for each of our three classification groups for the Stanford men.

The items are grouped together on the basis of the apparent meaning of the content. Thus the first eight items deal with attitudes toward the use of intellect. The intellectual group endorses items indicating pleasure and satisfaction in the use of intellect much more than the other two groups. Facts have an appeal for the grade and career groups, whereas ideas have more appeal for the intellectual group. It is once again evident that we are talking about group trends and there is some overlap between all the classes.

Some of the shifts in endorsement frequency that occur between the freshman and senior years illustrate some important questions for developmental theory. In item 122 we find a dramatic shift on the part of the grade group in the direction of endorsing the intellectual, critical-thinking side of the item. The career group hardly changes and is seen as maintaining a practical approach to life. In order to understand this shift by the grade group, we have to consider responses to other items.

The content of item 193 deals with the need for clarity and the tolerance for complexity. Here we once again see the career group moving toward greater need for the practical. When, however, we look at the results for the grade group, we see that they are the least tolerant of ambiguity of the three groups, and this does not change over the four years.

On the one hand, we see the grade groups expressing more enthusiasm about ideas, but at the same time there is evidence that they are the most rigid of the three groups. It would be our expectation that the shift in the intellectual direction for the grade group carries with it a very different set of attitudes and feelings toward ideas than we would find in the intellectual group. This difference can be understood in the context of another group of items that deal with attitudes toward family and self. Item 61, for example, reveals a certain pessimism and lack of confidence. Here we see the grade group having the highest endorsement frequency for this item.

Table 29

Items From the SM Scale

(Figures are percentages of those answering True)

(First fig. is '61 percentage, second is '65)

		Intell.	Career	Grades
7.	I enjoy reading essays on serious subjects. (T)*	74-76	64-50	50-54
298.	There is too much emphasis in school on the intellectual and theoretical topics, not enough on practical matters. (T)	11-9	29-24	21-21
297.	I would rather be a brilliant but unstable worker than a steady and dependable one. (T)	41-63	26-36	11-29
122.	Facts appeal to me more than ideas. (F)	14-11	33-36	54-25
162.	It is not the duty of a citizen to support his country right or wrong. (T)	46-72	36-55	18-64
93.	People ought to pay more attention to new ideas, even if they seem to go against the American way of life. (T)	76-93	76-90	75-82
57.	Nowadays more and more people are prying into matters that should remain personal and private. (F)	41-25	52-45	57-36
193.	I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer. (F)	17-18	29-36	43-46
88.	It is a pretty callous person who does not feel love and gratitude toward his parents. (F)	63-51	81-64	82-68
77.	One of my aims in life is to accomplish something that would make my mother proud of me. (F)	49-39	60-48	75-54
61.	It is better never to expect much; in that way you are rarely disappointed. (F)	20-21	17-19	39-36

*T or F in parenthesis indicated the direction for obtaining one point in the scale.

Table 29, continued.

		Intell.	Career	Grades
102.	My conversations with friends usually deal with such subjects as mutual acquaintances and social activities. (F)	39-28	43-43	54-46
238.	I have had more than my share of things to worry about. (F)	14-17	12-29	32-11
119.	I have been quite independent and free from family rule. (T)	45-66	57-76	64-64
5.	Nothing in life is worth the sacrifice of losing contact with your family. (F)	22-12	24-24	32-46

If we wish to become more speculative and search for some of the causes of this rigidity and cynicism, we find clues in another set of items. Here, in items related to the importance of parental approach and close family ties, we see a trend for the grade group to be much more immature. In contrast, the intellectual group is much more free or perhaps even alienated from the family. The career group falls somewhat in between these extremes.

In our journey through this maze of data we have moved from the analysis of differences among several OPI scales to the analysis of the meanings of individual items. Along the way we have examined the relationships of our classification system to grades, aptitudes, and college majors. Now it is time to bring the implications of all these data together and evaluate their relevance for college teaching and student learning.

Discussion

The needs of society and the happiness of individuals require that optimal use be made of human talent. If this is to be accomplished, we must begin to recognize that there are profound differences in the ways students learn and in their underlying patterns of motivation for learning. In this chapter we have tried to illustrate some of these differences by examining some of the corollaries of students' attitudes toward their courses. Our findings invite intepretation in several ways. From one perspective, we have clear differences; from another, complex interactions. In order to make this clear we will first make a bold extrapolation from the data. This will take the form of a composite picture for each of the classes, based primarily on the data from the Stanford men. After this composite picture is drawn, we will go on to examine the many inconsistent findings which made us aware that we are only at the beginning of a study of student reactions to the curriculum. The composite picture will be drawn from all the data presented so far, plus a few speculative leaps. Any reader who wishes to check out some of these ideas would find a starting point in the CPI results and the endorsement frequencies of the items from the SM scale.

The career group can best be conceptualized as comfortable in their relationships with others and with themselves. This comfort is perhaps bought at the expense of not seeing and feeling many of the subtle shadings of human experience. The implication is not that these men are defensively shutting out conflict and unknown impulses, but that they are more attuned to an external system of rewards than to some intrinsic set of human values. The culture has worked out well-defined pathways for achieving success, and these men find the path interesting and rewarding. The suggestion that there are other paths or other criteria of success is at best met with tolerant disbelief; at worst, with angry rebuke.

The career men are ready to take positions of responsibility in a man's world. Practicality is a credo. It is important to recognize that this in no way carries with it a downgrading of intelligence. These men are skilled in using their intelligence, so long as they can see an end product which fits their value system. What is downgrading is any commitment to an evaluation of their underlying value system. Along with this absence of commitment is the loss of potential for instituting fundamental change or creativity.

The men in the intellectual interest group (Group C) differ from those of the career group (Group B) in just this respect. They are more flexible, and a questioning attitude toward many of the "givens" in our society is apparent in some important areas of their thinking. Whatever path they choose must, for them, be a personally meaningful experience. While a sense of personal worth would be enhanced for the career group by conventional signs of success, students in the intellectual interest group are searching for something beyond the conventional. The differences in what these two groups find rewarding seem to be a key to understanding variations in their behavior and attitudes.

A clue to some of the causative factors operating here may be found in terms of the conflict the intellectually motivated students feel in their family relationships. We could speculate that they were exposed to a home situation where there were difficulties in their relationship with at least some member of the family. This results in not only a nagging dissatisfaction with self but also a continuing need to right the wrongs of the world. The usual kinds of reward are not enough to overcome this need. One would speculate that the career group did not encounter such profound dislocations in the family and thus acquired a more conventional pattern of self-reinforcement.

It should be made clear that we are describing the characteristics of the hard-core intellectual, though not all the students in our intellectual interest group can be classified in this way. Further clarification of the relationship between familial discord and involvement with ideas qua ideas is a necessary next step. At this point it is not clear whether it is the freedom to experience dissent in the family or whether some more profound familial discord is the essential ingredient. Another related question, which must be investigated, has to do with the differences between men and women with respect to the development of an intellectual orientation.

The relationship between personality and the use to which individuals put their intelligence is further elaborated by consideration of the grade-oriented group. We have characterized the intellectual group as using their intelligence to work through personally meaningful agendas. The grade group in some ways appear similar in the attitude of its members toward course work, but appear to differ essentially in their need for repetition rather than growth. Not only do these students work hard at mastering the course material, but they would seem, as well, to work hard to avoid integrating this material into other areas of their personality. An explanation for this can perhaps be found in the degree to which this group is estranged. The grade-seeking group is further removed from both other groups in several respects. They express greater concern about their interpersonal relationships and more dissatisfaction with them; they apparently perceive their college years as a battle just to survive.

If the other groups are conceived as following divergent paths to success, this group might be said to be on a circular path. Success is defined in terms of excelling on the immediate task; as soon as it is completed, they are back where they started. Self-respect is not accumulated, but only temporarily and haltingly renewed.

For the purpose of exposition and to facilitate discussion of the teaching process, we have tried to emphasize differences between these three groups. Before considering the teaching of individuals with such different academic orientations, we must come to grips with the realities of our data. Despite the general trend of the evidence which indicates the validity of the overall classification system, there are several points where the evidence has to be viewed as inconclusive or ambiguous. One problem area is related to the misclassification of individuals and the other is the lack of consistent findings across our four groups.

Although our findings for the personality scale differences among the three classification groups were consistently statistically significant, there was nevertheless always some misclassification. The ambiguity inherent in the original questionnaire responses and the many possible sources of error in the measuring devices could account for a large part of this misclassification. With respect to our main interest in this chapter, the problem of imperfect classifications is less central than the inconsistent findings across groups. We found that while there are consistent differences in personality characteristics associated with different attitudes towards the curriculum, this does not necessarily result in significantly different academic performances (GPA's). Why should personality characteristics be related to grade point average for the men at Stanford and not at Berkeley? Why is the relationship between GPA and personality characteristics not apparent for either group of women? We will briefly discuss the first question and then return to the second.

When we examine the classification of GPA's for the Berkeley men, we find that the "grade group" (Group C) is once again the highest. This was also the finding for Stanford. The range between the three groups is so small, however, that significant differences do not appear. The finding that the Berkeley men who classify themselves as having intellectual interests achieve the lowest GPA further confounds our results. We are encountering possible differences, not only in the grading practices of the two institutions, but something in the ethos of the students. Could it be that the "intellectuals" at Berkeley have other things on their agenda besides working for grades? Our data do not provide any clear answers here, but it does seem evident that the educational climate of the institution will interact with the personality characteristics of the student and will have a significant effect on his behavior.

Cutting across and interacting with these institutional differences are the culturally defined differences between men and women with regard to their use of intellect. The issue here can be formulated as follows: for men (at least Stanford men) their response to the demands of the classroom are affected by the differences in their underlying attitudes and personality characteristics; for women, although they may have profound differences in their underlying attitudes toward the required course work, their attitudes do not so clearly affect their behavior. It may be that women, from very early in life, are taught to separate their inner life (personality) from their behavior in school. Although college women traditionally work hard in school, they are faced with the future where they are most likely to have to abruptly stop their academic pursuits. The anticipation of this outcome could encourage women to keep separate the academic world from major segments of their personality.

In the last few paragraphs we have explored some implications of our findings with regard to how existing social structures and prevailing social expectations can affect the academic life of the undergraduate. We have done this with two related thoughts in mind. First, it is necessary to deal with some of our inconsistent findings. Second, it is necessary to keep in mind that despite our emphasis on the personality differences that exist among students, the total educational climate must be taken in account when trying to understand the behavior of the student.

We will now return to an examination of the implications of our findings for college teaching. In order to set some limits to the final part of our discussion, we will direct our attention to the teaching in those courses which are intended to have a liberalizing impact upon the student. Furthermore, for purposes of this discussion, we also accept as given, the fact that the curriculum is segmented into finite units and courses which often have no relationship to each other.

Our attention is focused on the required courses, such as the humanities, which are traditionally designed to awaken within the student some awareness of man's long struggle to be free and to cultivate esthetic feelings as well impart a certain body of knowledge. Put another way, the aim of a liberal education is to teach students how to think critically about a wide variety of human experiences and how to express these thoughts clearly.

When we contrast the aims of a liberal education with the differing personal goals of the students we can begin to define some of the problems facing the college teachers. Consider the students response to item 193 (Table 29) from the Social Maturity scale: "I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer." Here we find that only 17 percent of the intellectual interest group endorsed this item while 43 percent of the grade group and 29 percent of the career group endorsed it. Unless these differences in the students orientation to what he is looking for in a course are made explicit, both the students and the instructor can end up working at cross-purposes. Once they are made explicit, there still remains the important question about what should and what can be done.

Suppose one of the lessons of history is that for many problems clear-cut and unambiguous answers do not exist. How is the instructor to respond to those students who can not tolerate this perspective and, therefore, in some fashion disengage themselves from the teaching/learning process? The usual response of the instructor is to ignore the differing view of the student, or to show in some way his displeasure or to try to demonstrate on some rational basis why the student is not seeing things quite clearly. Perhaps, at any one time, such responses from the instructor might be appropriate. When they become the primary kind of response, as they inevitably do, for certain kinds of students the individual growth ceases to be a possiblity and the rote learning is substituted.

The necessary element in a response to a student who is thinking in logic-tight, oversimplified terms about a complex issue is some understanding of why it is necessary for the student to take that position. Here we can draw on the descriptions of the three groups presented earlier for some clues. We noted that the grade group was quite different from the other two groups because so much of their motivation seemed to be based on fear of failure. Consequently, this kind of student would require some kind of reassurance that by encountering more of the world's complexity, he would not be personally overwhelmed. The very fact that this student (Student A) has found it necessary to develop a simplified view of the world suggests that certain kinds of complexity are frightening to him. In contrast, a student (Student B) from the career group might be uninterested in some of the complexity of the world because it does not seem relevant to his particular plans. (To complete our scheme we might include a student from the intellectual group (Student C) who eagerly reaches out for the world's complexity.)

We have just suggested that both Student A and Student B might work to keep themselves disengaged from certain kinds of learning, but their motives could be quite different. A further point that is essential to this line of reasoning can be stated as follows: when an issue (problem) in the learning process has the potential to further the aims of a liberal education (e.g., simplicity vs. complexity), it will inevitably touch on some fundamental characteristics of the student (e.g., fear or an overly developed sense of the irrelevance of large parts of human activity).

This fact poses a dilemma for the individual instructor and for all of higher education. If the instructor does, in fact, try to make his course effective as a liberalizing experience, then it will be necessary to involve himself in a struggle with the students who have powerful resistance to this kind of experience. We have seen that in a single classroom the instructor can be faced with at least three different styles or orientations of learning. Given even a very sensitive and sophisticated observer of human behavior, the task of the instructor in the usual course is formidable if not downright impossible.

Higher education has long avoided facing up to this reality. The tremendous pressure to have a college degree and the enormous demands of our society for trained people have fostered an attitude where the commitment to the goals of liberal education are now often just rhetoric. It is only in the last few years that the students themselves are demanding some explanation for the discrepancy between what is promised and what is actually presented. No easy answers are available, but the students are forcing the question to be taken seriously.

Chapter VI

THE INCOMPLETE LIBERALIZING IMPACT OF HIGHER EDUCATION: CASE STUDIES OF TWO PRE-MEDICAL STUDENTS

Harold A. Korn, Ph.D.

Professional Preparation and Personal Meaningfulness

Acceptance into a prestige medical school is an occasion for congratulations. Not only is the student honored but the entire educational system takes a moment out to rejoice. His undergraduate college is pleased with the evidence that it has been successful. The medical school is pleased that it has wooed such a fine student away from other prestige schools. Each spring there are thousands of such occasions. The overall competence of the American professional Doctor of Medicine makes it difficult to question our system of higher education.

Despite its obvious success, fundamental questions remain unanswered about our educational system. They remain unanswered, in part, because they are so difficult to formulate. Abstractly conceived, these questions are concerned with how men can live the good life. At the undergraduate level these questions can be formulated in terms of the impact of liberal education on the lives of the students. For it is the avowed goal of such an education to confront the student with man's long struggle to make life meaningful and survival possible.

At the level of professional education those questions are even more difficult to formulate because even the rhetoric showing education's concern with student development is lacking. Traditionally, professional education has been task-minded, its emphasis placed upon training a competent specialist. But the fantastic increase in the rate of knowledge production and the ever-growing complexity of any professional problem have forced a new kind of orientation on those who educate future professionals. The creation of a technological society has paradoxically also created a greater need for broadly educated men. Many decisions made by professionals profoundly affect the daily lives of large numbers of people. Wisdom, now more than ever before, has become an important corollate of technical competence.

With this growing awareness of what is needed, some professional schools and organizations are putting more emphasis on the value of a meaningful undergraduate education. The interest is no longer in students who just demonstrate academic proficiency. There is also a search for students who have the potential for maturity and responsibility to handle the demands of professional life in the coming decades. To re-state the point in another way, it seems that the increasing complexity of our society will force upon us the need to re-examine our basic value system. Liberal arts education, which may have been considered a "frill" by many, will have to become a meaningful part of the education of all professionals. This is necessary for the sake of both their own personal development and of competent professional functioning. At present the structure of the liberal arts curriculum is such that it is not made meaningful to large numbers of individuals.

The two cases that follow will allow us to examine these issues in detail. We will examine the impact of undergraduate education on two men who have been accepted into a prestige medical school. These two men have been selected for analysis here for several reasons. First of all, they are very successful by the criteria the educational system has established. Second, they illustrate a variety of questions with which the system fails to come to grips. Third, the pattern of similarities and differences in the personality of these two men raise a variety of important theoretical issues for the psychology of assessment.

The two men were among the nearly two hundred students who were interviewed intensively twice a year for each of their four undergraduate years. The quotations used here are the verbatim replies to questions which appeared in the interview schedules. The interviewer's question will always be identified by underlining.

Students View the Curriculum

In their first senior year interview, the two students, Warren and Steve, were asked: "What has been the impact of formal education upon you as a person?" Warren answered as follows:

> "Very little. I don't feel I've learned a great deal. It's kind of disappointing. If I had spent four years marking time, I would have learned as much. The chemistry degree won't give me any happiness in the future."

Steve's answer was:

> "Well, I think I've got a lot more knowledge than I had before I came to the university...I can think a little more analytically and critically about problems. I had a lot of science courses, so certainly I can attack, you know, physics, chemistry, biological, mathematical problems better than I could before. But also I think about problems much easier, more deeply than I could. And I suppose I've become, in taking all the general studies course, I've become more well-rounded."

Quotations like these and the ones to come raise some interesting issues about our data. Some would argue that all we can reliably accept is what we can objectively measure. In such terms, Steve and Warren are remarkably similar. Both have been admitted to a prestige medical school after graduating from a prestige college. Both have worked to earn a cumulative grade point average of 3.29 and 3.11 respectively. In terms of their measured aptitudes both men have demonstrated a very high level of ability. The college board scores for Warren are verbal, 657; mathematical, 697; for Steve, verbal 622; mathematical 748. (Stanford men: mean verbal, 617; mean mathematical, 652.)

In spite of these similarities the introductory quotations suggest that the subjective experiences of these two men have been very different. It is in this realm where the good life is either found, ignored, or desperately sought. Furthermore, it is this realm which will make an important difference in the future professional lives of these men. There is increasing concern with the discrepancy between the physician's technical competence and his ability to view his patient's condition broadly and sympathetically. Unless our future physicians can come to terms with their own inner lives, they will be handicapped in their ability to respond to this realm in the patients they treat.

Given this emphasis on looking below the surface of success, we shall try to establish more firmly some of the differences and similarities which characterize Steve and Warren. Our first quotation was from the senior year. If we move back to the junior year there is another opportunity to view how college is affecting these two men. Both were asked to describe the impact of the first two years of college: "Apart from your courses, what has been happening in your life during the past two years that has been of great importance to you?"

This is Warren's reply:

> "It's difficult to take it out of the academic sphere. The most important thing is a feeling of marking

> time until I go out into the world. I realize the thinness of the intellectual facade I've been fabricating. Undoubtedly I will not use nine-tenths of the course information gotten here at the University. I probably will not use any of it if I go into dentistry or medicine. Of course, it'll be a different story if I go into bichemistry....There's a difference between one's intellectual and academic life. In the past few years, I feel I've been taking courses which have little impact on what I do and which intellectually are not fruitful, or I haven't perceived it. These two years have not meant a great deal. Yet I can't imagine myself in any other situation. I'm where I belong. I have no doubt about it."

"Would you have felt differently if you had been able to spend more time in the humanities and social sciences?"

> "Perhaps, but even this I feel is quite sterile. The only worthwhile thing you could hope to do is to renounce yourself and help others or renounce others and help yourself totally. This probably shocks you or startles you but in doing this, in renouncing others, you'd be able to devote your entire energy to attaining a plateau."

It is difficult to understand the meaning of this answer completely. Warren seems to be struggling with the question of why he finds the curriculum so sterile. His reply seems to be at first a non-sequitur. But the intensity of feeling suggests that it is a very personal statement of how an emotional conflict plagues his intellectual life. Somehow Warren cannot allow himself to integrate his concern for other people with his motivation for achievement. The curriculum becomes a battleground for some intense personal conflict with origins in the distant past.

Steve's response to the same question was: "It's a gradual thing, considering what I want to do with my life, so when I get through I can say it's been meaningful. I think about that more and more."

The evidence presented so far would lead one to characterize Warren as disappointed, dissatisfied and self-critical. He writes off his academic success as "intellectual facade." He's unable to integrate what he has learned into something meaningful and personally satisfying.

Steve comes across as someone who is searching for the meaningful. For reasons we shall try to examine later, he's been able to extract from essentially the same science curriculum as Warren's some sense of discipline and purpose. There is an element of the youthful, philosophical quest in Steve.

Additional insight is gained when we consider how these two men responded in their sophomore year to a request to describe how their convictions have changed. Warren said:

> "The search for something of value in life is becoming important. Perhaps this is life itself. Thus I feel that I must live life instead of passively accepting it. Unfortunately, I don't quite know how to do this. Many things that I consider worthwhile in this vein are ruled out by economic considerations. This consideration immediately prompts the consideration that they are not worthwhile."

Steve responded:

> "Certainly I'm far more future-oriented now than ever before. I look to the future as being a reward for the tedium of college life. I've been giving a lot of thought recently to the problem of whether it is best to say whatever you think. My friends say 'play it cool' - but I don't know how to play it cool."

This information both confirms and complicates our characterization. At this point, it is Warren who poses the question about the meaning of life and it is Steve who is reacting to the tedium of college life. Despite the similarity in the content of the struggle reported by these two men, there are sharp differences in the underlying attitudes. Warren can admit to yearning for the good life but he sees it as inaccessible. He struggles with the issue in logic-tight compartments of renunciation and economic necessity. Warren feels caught, wants to fight, but doesn't know how.

Steve engages the world in a far less abstract manner than Warren. Should he say what he thinks? How do you restrain yourself? These are the mundane but interpersonally vital questions that he wants to answer. Warren has a detachment from his feelings which gives him some of the coolness which Steve's friends advised for him.

This dimension of detachment versus a meaningful involvement is of great importance in understanding these two men because it is tied to many of the similarities and differences we have seen. We have seen that on many objective criteria these two men were very similar, e.g., major, career, academic performance. On our psychological measures of self-control and impulse expression, their scores are nearly identical. In contrast, we see that in the realm of subjective experience they are quite different in their style of handling feelings and in making decisions. We will now examine more of this evidence as it is revealed in their pattern of career choice.

Steve started out as a mathematics major but found that he was not so good in mathematics as he thought. He had a need to excel and couldn't live up to his own expectations. In addition, he found his courses in the History of Western Civilization and the humanities so fascinating that he considered dropping his mathematics major so he could gain a broad range of knowledge.

Warren declared a major in chemistry when he entered the university. He worked as a laboratory assistant in a chemical plant during the previous summer and he also had been a semi-finalist in a national science contest. During his first interview he expressed some interest in pursuing philosophy as a minor.

From the day they registered for their first college courses, Steve was expressing a restless curiosity and Warren a staid and steadfast career orientation. The evidence for this is provided in Table 1 where we have their first quarter courses and grades. Steve enrolled in an upper division world literature course and it turned out that he could not compete with the sophistication of the other students. He reported that he learned a great deal but also suffered a severe blow to his self-confidence. Warren took a traditional academic load and came up with a very respectable grade point average. (See Table 1, below).

Table 1

First Quarter Grades

Steve

Course	Grade
World Literature	D
Western Civilization	B
Men's Glee Club	+
Analytical Geometry and Calculus	B
First Year German	C

Warren

General Chemistry	A
Tennis	A
Freshman English	B
Analytical Geometry and Calculus	B
Western Civilization	C+

Now moving again to their junior year, both students were asked how their interests had changed since high school. Steve said:

> "In high school, English and literature courses didn't appeal to me. I was always in science courses. I'm getting tired of science courses now. I seek relief in English courses. In high school, I never gave any thought about teaching at the high school level. It now seems to me more interesting. It seems an interesting and rewarding and quiet life. This of course is from the perspective of the pressures of college life. I'm not sure if I really care for pediatrics. In teaching, your life is your own. Also the idea of having a lot of little kids' lives in my hands (as a pediatrician) is not very appealing. The pressure here is increasing. Looking back in high school it was fun. If I didn't think it was chicken, I'd go into teaching right away. But I'm afraid I'd just be avoiding the pressures of medical school. Also I have to convince myself it would be respectable to teach."

Warren was asked the same question. He said his interests had not really changed; but he also felt there wasn't enough time to pursue his earlier interests in music.

In contrast to Warren, Steve can report large differences in his interests and he can actively pursue some of these newly developed interests. Despite this evidence of expanded awareness, we nevertheless see Steve moving cautiously in his change of major from mathematics to physics to chemistry. What prevents Steve from using his undergraduate years to explore genuinely the alternatives to his previously chosen career? A partial answer comes from a response to the following question in the seventh interview: "What kinds of things annoy you?"

> "The system at Stanford as far as grades go, that people are so grade conscious - as I was for a year or two; that annoys me. And I don't think that things are conducive academically - a conducive environment in which to learn. I've talked to professors about this and they don't seem to know any other way, so I guess grades will always be in undergraduate universities. But I think without grades I could have done a lot more in school than I did. In just taking more courses without worrying

> about how I was going to do. It's a funny thing, you have to decide whether you're going to play the game and if you want to go to medical school, for instance. Even if I had these beliefs that I wasn't going to study for grades and all, I'd still have to play the game and get good grades or else my application would come in with another guy's whose grades are a little better, and he is going to take that guy and I won't get to my goals, so I am sort of being forced into playing a game, which I was not sure I really liked. In fact, I know that I didn't want to play; that is, fighting it out for grades in pre-medical courses."

This is revealing because it is stated as an example of something that really annoys Steve and at the same time suggests that he felt it necessary to submit to such a personally unsatisfactory situation. Steve feels he is a victim of an impersonal and unsympathetic system. He is annoyed by it and does what he can to circumbent it. Warren seems to accept the system stoically.

There are two broad kinds of question raised by the experiences of these two men. The first has to do with the college curriculum and its intended impact. The second views the experiences of these two men in light of their past experience and how this has influenced their capacity to respond to the curriculum. While we are primarily concerned with discussing the interaction that takes place between the individual and the undergraduate curriculum, this can only be accomplished after we sketch in more about the psychological background of these two men. After this excursion into the realms of personality assessment we will return to the problem of how the curriculum could have been modified to encourage these men to be more open to the intended impact of the liberal arts curriculum.

Personality Assessment and Description of the Students' Background

We have available for these men several measures given when they were entering freshmen and again when they were graduating seniors. Unless otherwise noted, all scores will be reported in standard score form.

In many respects these measures reflect the pattern of similarities and differences we have seen at the phenomenological and behavioral level. To begin with, we shall consider some of the similarities. On the OPI, in Table 2, Steve and Warren have very similar scores on SM (Social Maturity) and IE (Impulse Expression); both are very close to the mean of the distribution. On the CPI, Table 3, the Sc (Self-Control) scale score is very similar for both, and appears in the bottom quarter of the distribution (the correlation between SC and IE being r =.48). They are also very similar on the Re (Responsibility) and Wb (Well-being) scales.

Table 2

Omnibus Personality Inventory

(Freshman scores)

Scale	Steve	Warren
Social Maturity (SM)	49	50
Impulse Expression (IE)	47	50
Social Alienation (SF)	51	49
Masculinity (MF)	56	62
Estheticism (Es)	53	52
Developmental Status (DS)	49	50
Authoritarianism (F) raw scores	97	119
Ethnocentrism (E) raw scores	51	59

Table 3

California Psychological Inventory

(Freshman scores)

	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe
Steve	37	41	41	50	63	44	52	47	32	54	33	63	33	56	43	54	61	49
Warren	60	49	53	54	74	46	50	63	30	38	32	54	38	46	36	46	44	44

Do - Dominance, Cs - Capacity for Status, Sy - Sociability Sp - Social Presence, Sa - Self-acceptance, Wb - Well-being, Re - Responsibility, So - Socialization, Sc - Self-control, To - Tolerance, Gi - Good Impression, Cm - Communality, Ac - Achievement via Conformity, Ai - Achievement via Independence, Ie - Intellectual Efficiency, Py - Psychological-mindedness, Fx - Flexibility, Fe - Femininity.

Now we can consider the differences between these two men. Two clear dimensions emerge. One we can label as a general tendency to be dominant and assertive; Warren is considerably higher on the following scales: Dominance, Capacity for Status, Sociability, Social Presence, and Self-Acceptance. Further support for this assertiveness comes from the MF and Fe scores, where Warren's scores are representative of more "masculine" attitudes and interests.

The other dimension can be described as a general tendency for rigidity in thought and action. Here we find Warren high on the Authoritarianism scale and low on the Flexibility scale. While Steve has a relatively high score on the Fx scale, he also has a high score on the Communality scale, which suggests a certain conventionality in his thinking.

Still another important difference between these two men occurs on the Socialization scale. Warren's very high score suggests an internalization of society's standards to such a degree that his own freedom of action is seriously impaired.

During their senior year, both men filled out the Senior Questionnaire which adds additional information about their psychological make-up. We will summarize some of this information briefly:

a. Both described themselves as largely dissatisfied with themselves as freshmen.

b. Steve described himself as reasonably satisfied as a senior, while Warren said he was moderately dissatisfied with himself.

c. Warren states that important decisions at home were usually made by his father, while Steve said by his mother.

d. Warren states that before he entered college his mother was over-dependent on her husband for her happiness.

e. Warren states that before he entered college, his parents seldom differed in their views, while Steve states that there were differences often and strongly expressed.

f. They were both asked: "Which of your parents do you resemble more in your emotional make-up?" Warren checked mother and Steve checked father.

Further information about the psychological background of these two men comes from other parts of their interviews when they report how they see their parents' personality.

Steve describes his father as depressive, not liking to make decisions, worrying that the other person would want to do something else. He is frugal with himself. He is opinionated but socially shy. He is quiet but has occasional outbursts of temper. Steve feels he has a lot of these traits also. He describes his mother as a very dominant person. She is always president of the PTA. She controls the life of the family. She makes Dad take her out instead of letting him brood at home, and Dad then has a good time.

In Warren's description, there are hints of an ambivalent relationship with a father "who felt he knew everything." But he is soon described as a devoted father who wanted his son to have everything he himself did not have. There also is some discussion of the father as having been socially retiring during his adolescence. Mother is described as very intelligent. She characterizes herself as manic-depressive, but Warren disagrees, though he thinks she is somewhat moody. He finds himself more like her than his father, but denies that he is moody.

We can look for further clues about Steve and Warren in their different descriptions of the emotional climate of their childhood experiences. Warren was never exposed to open parental arguments while Steve found this a part of everyday life. Warren's father was aloof and made all the decisions. His mother was overdependent on this strong father and seemed a victim of very strong feelings that only could be manifested in depression and moodiness. For reasons we can only speculate about, Warren found it necessary to identify with his mother in terms of emotional make-up. Strong feelings were there but they were never openly identified. In Steve's home we find the mirror image of the dynamics found for Warren. Steve's father is weak and moody. The mother is strong and assertive. Again we do not know all the reasons, but the weak parent is chosen for identification. Steve finds that he is like his father. The striking difference in the emotional tone of these two families is revealed by the strident note of open conflict in Steve's family. Perhaps, of even greater significance is the reversal of the culturally acceptable pattern in which the father is the head of the American household.

From Warren's perspective as a child, all he could see on the surface was evidence of being a member of a very successful family. His father was clearly in charge as a father should be and his mother idealized her relationship with the father. Given this surface appearance of family success and the evidence of Warren's strong sense of guilt, we can infer the following ground rule: if Warren felt troubled it must be his own fault. How then did he come to terms with the many strong and conflicting feelings which were beneath the surface in his family? It seems evident that the rigid control we see reflected in the psychometric data was an almost inevitable solution. We see evidence during the college years that Warren is aware of a struggle within himself but he is not free to examine what the struggle is all about. Indeed, much of the time he works hard to deny the existence of the struggle.

Steve had a wide variety of evidence that things were not as they should be at home. It was clear from the way his parents interacted. It was also clear from the way his family structure differed from the "typical" family structure. His only choice was to blame himself, but he did it in a different manner from Warren. He viewed the world in such a way that change was deemed possible though hazardous. In some respects we can say that change was more of a necessity for Steve because he did not have the same way of protecting himself from uncomfortable feelings that Warren had evolved. Warren essentially was operating within a closed system. His thinking consisted of many logic-tight components that permitted avoidance of serious conflicts.

Interaction between Personality and the Curriculum

At the beginning of this paper, questions were raised about both the personal experience of how life can be made meaningful and the socially significant issue of how to provide appropriate training for future professionals. Most college catalogues promise to provide a liberal education and to make available the best in specialized study. Students expect that their undergraduate education will help them come to terms with both the daily task of understanding their experience of the world and their long-term career aspirations. Students hearing the rhetoric of higher education and reading the college catalogue are encouraged to believe that the curriculum will provide the structure for fulfilling their expectations. Because this promise is not adequately fulfilled is one reason why contemporary higher education is facing so much upheaval and confusion.

Steve and Warren have provided us with the details that illustrate why the promise is so difficult to fulfill. In studying their cases we can see the basic dilemma facing higher education. While there is a great expenditure of effort on the part of the faculty and an urgent quest on the part of the student, undergraduate education fails to make itself relevant to the student's basic concerns. Both Steve and Warren wanted something more from the liberal arts curriculum but could not escape the partly-coercive and partly-seductive call of specialized study. Both these men at one time or another expressed a vital concern for finding the meaningful in life. In the abstract, they wanted what the liberal arts curriculum is said to provide. Recall Warren saying: "The search for something of value in life is becoming important..." and Steve saying: "...considering what I want to do with my life, so when I get through I can say it's been meaningful. I think about this more and more." Despite their ability to recognize this quest, each in somewhat different ways found it easier to avoid coming to grips with the issue. We have outlined some of the reasons why the past experiences of Warren and Steve caused them to be so ambivalent about using their undergraduate years to search for enlightened understanding. To generalize we could say the following: A liberal education has the potentiality of confronting the individual with the need to examine feelings, attitudes and beliefs that he has uncritically acquired during his lifetime. The process of self-examination is at best painful and at worst a disintegrating catastrophe. This interplay between a desire to search for understanding and the often unrecognized need for avoidance is a phenomenon always present, but it has a special intensity during late adolescence.

It is this fundamental ambivalence toward growth and learning which is both the hope and the bane of those who are committed to the implementation of the ideals of liberal education. The dynamic play between wanting to know and being afraid to know could provide the motivation necessary for the difficult task of becoming an educated person. A great deal of motivation is needed to maintain the discipline necessary to continue the effort that is involved in critical evaluation and to put up with the pain of self-evaluation. The potential for this kind of motivation is present in nearly all adolescents. We have observed how Steve and Warren flirt with their quest to understand more, but turn away at critical choice points. Something more was needed to encourage them to persevere with their search.

Just as the forces of constraint operate in students, so do they operate in the faculty. While many faculty members may subscribe to the ideals of a liberal education, they often fail to implement these goals in the classroom. Again these forces of constraint must be examined in terms of the internal determinants and the external determinants. Here we can only mention these in passing, as they bear on our understanding of Warren and Steve. If some faculty member teaching one of the "liberalizing" courses for these two men wanted his course material to become relevant, it would be necessary for him to tolerate the potential stress or genuine excitement created by such an experience. The quality of learning that is at the heart of a liberal education necessarily involves the student in some kind of crisis or at minimum some high pitch of feeling. The student's response to his own intense feelings will necessarily be communicated to his teacher in one form or another. If the teacher is going to encourage further learning at that particular point, he must be prepared to respond appropriately to the student's feelings. The whole approach of the typical college professor makes this kind of relationship not only unlikely but something which is considered anti-intellectual.

This is one part of the dilemma facing higher education. Unless the relationship between learning and the emotional response to learning is taken into account in the daily teaching of the liberal arts, learning will tend to remain a recounting of facts and education will be an impersonal game.

While the sources of resistance that come from within are powerful, the environmental pressures that exist can either work to strengthen them or encourage a genuine climate for learning and teaching. For both the faculty and the student the commitment of the present-day university is so much geared to specialized study that the liberal arts are given an impossible task. We have suggested that the forces of constraint within individuals are so great that genuine learning is at best a very difficult task. When this "natural" obstacle is combined with institutional forces to move away from understanding and critical evaluation, frustration is inevitable.

For Steve and Warren, the curriculum and their perception of the entire pattern of medical school recruitment worked against the intended impact of the liberal arts curriculum. Given their need for the structure of the science curriculum and the security of a future career in medicine, they tacitly accepted and perhaps even welcomed a long series of ready-made decisions about their future course of action; it is not accidental that this commitment to the future also meant their need to search for personal meaningfulness was greatly diminished.

The issue here is not whether these two men should have chosen a medical career. The issue is more paradoxical: the pursuit of a career in medicine encouraged patterns of behavior that are inimical to certain aspects of being a physician. Put another way, we can see that one arm of the medical profession is searching for broadly educated men while another arm of the profession encourages undergraduates to be narrowly career-minded and grade-oriented. There is not only a loss in terms of the individual lives of these two men, but a loss, as well, to the many people whom they will someday meet as practicing physicians.

Chapter VII

PERSONALITY DIFFERENCES AND RESIDENTIAL CHOICE*

Marjorie M. Lozoff, M.A., ACSW.

The purpose of this chapter is to describe the social development of a group of college men during their undergraduate years. The description is based primarily on information given to us by 42 men who were interviewed twice a year during their four years as undergraduates and also on the test scores and questionnaire responses of 271 Stanford men attending that university from 1961 to 1965. Additional information was obtained from interviews with other undergraduates, graduate students, resident advisers and faculty, as well as class observations and meetings with groups of students. This chapter has been written against a broader background of comparable knowledge about the experiences of women students at Stanford and of men and women students at the University of California at Berkeley.

Two samples will be referred to frequently. The interview sample refers to the men whose cooperation has supplied us with in-depth understanding of many aspects of college life and personality development. The relative smallness of this sample enabled us to obtain a detailed picture of their backgrounds and experiences. Each student was seen by more than one interviewer and frequent staff discussions enabled us to pool our observations and maintain an overall impression of the interview sample. The interviewers were trained both as teachers and clinicians and the interviews were taped. In addition to the interviews, with the consent of the 42 men, their friends were asked to give us written descriptions of personality and behavioral changes that they perceived in our interviewees. For the 42 men, we also have freshman and senior psychological test responses, Senior Questionnaire replies, self-ratings and written material, ratings by interviewers and friends, aptitude scores and academic transcripts.

The questionnaire sample in this chapter is made up of students who answered the Senior Questionnaire. Out of a total of 281 men who responded to the Senior Questionnaire, we selected all those who had clearly defined residence histories (N=236). This sample was divided as follows: fraternity men who lived on campus (N=69); fraternity men who lived off campus (N=44); unaffiliated men who lived in off-campus apartments (N=44); dormitory men (N=42); and eating club men (N=37). This sample represents about a third of the men in the senior class.

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*A listing of Tables is provided at the end of this chapter. (Pp. 371-72.)

Anticipation of Improvement in Social Life

With the exception of an important segment of the students, usually found in fraternities or sororities, most of the students who entered the two highly selective universities had postponed many of the social and developmental tasks of adolescence until their college years. During high school, many of them had concentrated on proving their competence as students in order to gain admittance into these universities. Some students had postponed development in the social area regretfully and others, because of feelings of inadequacy, had utilized the reality of the difficulty of college entrance as a rationalization for limiting social involvements. In any case, most of the students looked forward to an improvement in their social relations during college, when they hoped to find themselves among peers of comparable ambitions and intellectual capacities.

Reliance on Peers for Guidance

As we interviewed students, we were impressed by the importance they placed on their social development. Some students handled this area with painful avoidance or denial, but most appeared to be deeply involved in trying to understand themselves and how they related to other people. This absorbed their energies and, in one way or another, affected their academic and intellectual activities. The university, as an institution, showed relatively little interest in providing guidance or carefully planned facilities directed toward social development. The challenge of aiding youth in developing academic, intellectual and vocational skills was its area of competence and the problem of supplying housing, buildings, and faculty was an additional task. Meanwhile the students were relating to each other in ways that were both constructive and destructive. By trial and error they developed varying degrees of social skills and responsibilities. In spite or because of egocentric involvement with their own pressing personal developmental tasks, they offered disinterested or narcissistically biased or psychologically astute guidance to each other. Receptivity to peer pressures varied with the anxiety of the recipient, his stage of separation from symbiotic attachment to the parents, his sense of autonomy, and innumerable other factors, including identification with charismic fellow students.

Definition and Urgency of Developmental Tasks

Important developmental tasks of late adolescence seemed to depend upon the support of peers for solution. These tasks included evaluating oneself as a person separate from one's family and clarifying aspects of one's sexual role and career goals. As the students faced the actuality of the separateness of their existence and the need to seek out and adapt to peers for gratification of their emotional needs, aspects of this process were often accompanied by painful emotional adjustments. These tasks have a particular urgency during this period which cannot be postponed because of academic demands. Often membership in an affiliation group or inability to become part of a group had meaningful effects on this process. In either instance, sharing experiences and values with one or several friends influenced the tempo of the separation process and provided experiences utilized in the clarification of the student's self-concept and goals. Dr. Joesph Katz, in an unpublished paper, commented:

> "Most students have relatively narrow ranges of friendship associations. To be stressed is the fact that these groups make very specific demands on such matters as when and how alcohol is consumed, what kinds of people of the same or opposite sex one should associate with, even what kinds of views are at the fringe but acceptable and which are purely beyond the fringe. The peer pressures receive added force from the fact that they are usually derivative from and parallel to the views held in the students' own home situation. Therefore, deviation imperils not just one's association with the group but even one's deeper ties with one's upbringing."

The purpose of these chapters will be to describe the influence of family values, housing-affiliation groups and peers on individuals. We shall begin with a description of groups of students who lived in dormitories, off-campus apartments or were affiliated with eating clubs or fraternities during most of their last three years at college. We shall stress commonalities within each group and differences between groups. This is on the assumption that each group produces circumstances and pressures which affect students. Then we shall use excerpts from individual case studies to indicate the role of men friends in meeting the emotional and social needs of the students and reinforcing or changing their values. In a paper in preparation, the author will describe the relations of the men with their women friends and explore with them their attitudes toward sex, marriage, and masculine and feminine sex roles.

Problems of Freshmen Dormitories

All entering students at Stanford are required to live in dormitories. The bulk of the men live in a complex of houses exclusively reserved for freshmen. The assumption that young people, accustomed to homes, will adjust easily to the challenge of living in a multi-purpose room with a stranger disregards a many-faceted discontinuity in their lives. This new dormitory living occurs at a time when they are feeling insecure and at a loss for familiar cues. Within the freshman dorms, personality types who had consciously avoided each other were thrown together. Suffering separation pangs and fearfulness about their adequacies, students were not receptive to differences. Yet, in the freshman dorms, students with meaningful differences in backgrounds, values and personalities lived together and were forced into a closer and more frequent contact than they had experienced with their best and most carefully chosen friends. Sometimes as roommates, they were placed in little box-like rooms where retreat into an alcove or corner for escape and privacy was not possible. Many of the students reacted to the freshman experience by intensification of dislike of those who were very different from themselves and became determined to choose housing arrangements which would protect them from such differences.

THE FRATERNITY MEN

After their freshman year, the men at Stanford were free to choose fraternities or dormitories as their residence or to move off campus. I will discuss the fraternities first for several reasons. During the period studied approximately fifty percent of the men students belonged to fraternities and about the same percent were in our interview sample. Besides their numerical superiority over other groups in our study, the fraternity men were objects of comparison, reluctant admiration and angry disapproval by other men and women. Both the men and their system evoked strong feelings of disapproval and approval, and an understanding of this group may shed light on current university values and social patterns. The system seemed at its best, to encourage a sense of loyalty and security for the in-group and at its worst, a permissive encouragement of regressive and undemocratic behavior. The system appeared to have vitality which may be conveyed by the material which follows. The men, on the whole, differed from other groups in their appearance, interests and attitudes toward group activities. The general impression made by most of the fraternity men on the interviewers was one of self-confidence, physical grace and attractiveness. This was true regardless of social class or the quality of the fraternity in which they had membership. This appearance was not accidental. It was the result of several factors in the men's pre-college experiences. First, most of them came from families where the parents were sociable. Second, during their high school careers many of the fraternity men had been in the "limelight" by virtue of positions as cheerleader, athlete, or student body officer. Their high school years usually were not characterized by outstanding intellectual or artistic interests. Most of the men, during their high school years, had consumed and enjoyed alcoholic beverages and had had considerable experience in dating girls. Prior to matriculation, most of the fraternity men had considerable experience in group participation and had enjoyed a feeling of superiority over their high school classmates in these areas.

Commonalities of Interests and Aspirations

The average verbal and mathematical aptitudes of the fraternity men were lower than those of men in the other groups. This was particularly true in regard to verbal aptitudes.[1] On the other hand, if students had been tested and rated on the basis of aptitudes in physical activities or group participation, these men probably would have been on top. The fraternity group is made up of many students who have enjoyed the company of other men and want security and response from their peers. The fraternity traditionally has provided a vehicle for obtaining these supplies. As a freshman, the son of a professor from a large university explained his interest in group and social activities as follows:

> "A lot of people like to be by themselves, just know one or two people really well and aren't interested in group activities and being with a group of people. I'm not like this, so I better join a fraternity.
>
> "It's hard for independent freshmen to get dates. There's an awful lot of upperclassmen who don't have girls and they reach down to the freshmen girls. A lot of girls come to college and are interested in fraternity parties and they don't find much interest in freshman men."

Another student, at the university on a scholarship and from a small-town, low-income family gave the following reasons for joining a fraternity:

> "A fraternity is a unique experience because although it is selective and the selection process isn't always fair, you still find--after rush is said and done--that you are living with people with whom you have common interests. People with whom you can get going in one direction easier than if you were in a dorm. Consequently you'll have a unity you might not achieve elsewhere. You can organize things and get them going."

The differences in scholastic aptitudes were a source of guidance for these men in planning their futures and in their behavior during

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[1] Table No. 1

Means on Verbal and Mathematical Aptitude Tests*

	Eating Club (N=88)	Frat/On (N=205)	Frat/Off (N=119)	Off Campus (N=122)	Dorm (N=66)
Verbal	636	610	608	631	653
Mathematical	674	655	648	662	688

*Tables to follow will have smaller frequencies than Table 1. This table includes all students where residence was unambiguous. Tables to follow, with one exception, include only students who responded to the Senior Questionnaire.

their college careers. From data based on a questionnaire mailed to graduates of the class of 1965 in January, 1966, it appeared that a large proportion of fraternity men were planning careers that involved business or legal training. It was apparent that many of them aimed for managerial and administrative positions rather than professional or artistic careers.[2] The fraternity men appeared to be interested in a model which would be appropriate for potential leaders of men, persuaders of men and decision-makers. Their physical vigor and the relatively limited emphasis they placed on their verbal skills may have contributed to their capacities to make quick and easy decisions on the one hand and to avoidance of introspection and complexity on the other hand.

In the Senior Questionnaire the men indicated the activities they had participated in during their college years. (See Table 3) The fraternity men were significantly different from the other groups of students in their interest in sports and social activities and parties. This is not surprising in light of their skills and future life goals. On the other hand, when compared with the other groups, they reported less activity in areas that involved cultural interests and services to less fortunate people. Life within the fraternity enhanced the interests that the men had prior to college entrance. On the positive side, this included a willingness to assume responsibility for group activities and to offer loyalty and a sense of belonging to a chosen group of fellow students. On the negative side, this often led to an intensification of a high school model of masculinity, including admiration of heavy drinking and conquest of women, contempt for individuals who were less attractive, strong and adventurous, and condoning of aggressive behavior toward individuals who were not in the "in-group." Although most men at

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Table No. 2

Post-Graduate Status of Senior Men One Year After Graduation

	Eating C. (N=44)	Frat/On (N=93)	Frat/Off (N=55)	Off-Campus (N=51)	Dorm (N=37)
Business School	20%	22%	16%	04%	03%
Prof. Schools					
Engineer	16%	06%	02%	12%	08%
Law	07%	28%	25%	18%	16%
Medicine	04%	07%	15%	14%	15%
Graduate Schools					
Science & Math	14%	09%	09%	08%	18%
Humanities	11%	05%	07%	10%	16%
Social Sci.*	22%	14%	24%	18%	15%
Education	00%	04%	00%	06%	05%
Other	03%	04%	00%	00%	04%

*The fraternity off-campus students were in international relations, economics and political science (none were in psychology, sociology or anthropology).

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Table No. 3

Activities: Percentage of Subjects in Each Type of Living Group Who Participate Frequently in the Following Activities

	Frat/On (N=69)	Frat/Off (N=44)	Eating Club (N=37)	Off Campus (N=44)	Dorm (N=42)	X_2	df.
Reading							
Non-fiction	45%	50%	62%	52%	62%	5.00	4
Fiction	30%	39%	41%	39%	26%	2.63	4
Cultural and Service							
Lectures	19%	16%	30%	23%	15%	10.42	8
Student Committees	19%	16%	19%	15%	5%	11.12	8
Service Activities	7%	7%	16%	0%	7%	6.36	4
Creative Expression	10%	14%	16%	23%	17%	7.23	8
Museums, Drama, Symphony	6%	7%	16%	13%	19%	10.44	4*
Political Activities							
Campus	12%	7%	14%	5%	7%	4.07	4
National & Community	1%	0%	14%	0%	5%	7.79	4
Civil Rights	0%	5%	3%	2%	5%	11.66	4*
Social Activities							
Social Activities, Parties, etc.	71%	80%	46%	34%	12%	54.40	4***
Off-Beat People and Places	4%	9%	5%	7%	2%	14.52	4**
Travel	43%	45%	30%	45%	21%	24.65	8***
Movies	19%	25%	32%	41%	20%	11.61	4**
Church	20%	9%	16%	9%	21%	6.03	8
Athletics							
Spectator Sports	75%	57%	43%	39%	24%	32.92	4***
Participant Sports	65%	57%	35%	27%	9%	58.97	8***
Rock Climbing, etc.	13%	9%	8%	7%	2%	8.21	4

* $p < .05$
** $p < .01$
*** $p < .001$

In the Questionnaire, the students were asked whether they had participated in each activity frequently, occasionally or never. These X_2 are based on the frequency of response of the members of the living groups in the three categories resulting in 3 x 5 contingency tables with 8 df. Where the frequency in the "frequently" or "never" categories was extremely small, they were combined with the "occasionally" category resulting in 2 x 5 contingency tables with 4 df.

Stanford drank frequently during their college years, the fraternity men were more apt to take "getting drunk" for granted as acceptable and anticipated behavior.[4] However, most of the men drank more heavily during their sophomore year when they first entered the fraternity than they did in later years. Individuals who were not able to control their heavy drinking had difficulty surviving at the university.

Backgrounds of Fraternity Men

Regardless of social class the eating club men (to be discussed later) and the fraternity men tended to come from families where the parents were younger than those of unaffiliated men. On the average they were more likely to have brothers, and less likely to have sisters or to be only children. From our interview sample of 22 fraternity men we derived the impression that although each of the fraternities had a number of members who came from minority or low-income groups, the pace setters in the fraternities were men who came from "white Anglo-Saxon" families where the parents had positions of affluence and influence within their communities. We will refer to these fraternity men as "Inheritors."

Of the thirteen "Inheritors" whom we interviewed for a four-year period, six came from prep schools and the others from public schools in upper middle class suburbs. As the successful families of the "Inheritors" represented models that appealed to most of the fraternity men regardless of their class background, a description of these parents is worthy of special note. The admiration the boys showed for their fathers was evident. In some instances, the fathers were respected as leaders in their communities and sometimes they had national and international reputations. These fathers were often "above" the layer of management where conformity and depersonalization is evident and their strengths seemed to lie in a capacity to understand different points of view, make clear-cut decisions and assume responsibility for them. The sons were aware of this and of the ulcers that sometimes had accompanied this necessary self-discipline.

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[4] Table No. 4

Number of Times Students Described Themselves as Being Drunk During Past Year

	Frat/On (N=69)	Frat/Off (N=44)	Off-Campus (N=45)	Eating C. (N=37)	Dorm (N=42)
Never	20%	18%	23%	41%	67%
Once	09%	16%	13%	26%	12%
More than once	68%	66%	64%	43%	21%
No answer	03%	00%	00%	00%	00%

The boys indicated respect for their fathers growing out of their accomplishments and prestige but also out of some distance from them. The fathers had often been away from home, but the homes they had been away from reflected the power, wealth, and status of the father. When the fathers had been home, they had been interesting to their sons and interested in their athletic, social and academic achievements. Not infrequently the father expressed nostalgia for his carefree college days. Often these fathers drank heavily, belonged to elite country clubs, and had executive positions in business and finance.

As Nevitt Sanford says, the "Inheritor" fraternity men were not "Momma's boys." In fact, some of the contradictions in their attitudes about women to be discussed in an article to be published later are understandable, partly as a result of their parental situation. The mothers were younger than the fathers and had no occupational and few intellectual interests although most of them had college educations. Home and community activities, most of them social or aesthetic, occupied their days. References to the mothers by their sons were often affectionate but condescending. The boys discounted their mothers as being unable to have objective and balanced opinions. The mothers appeared to their sons to be less well-informed than the fathers and to be more opinionated and less tolerant regarding political and social matters. The mothers were described as attractive, devoted to their families and friends and sometimes involved in church activities. The fathers were disinterested in the latter although not rebellious. To the boys, their fathers appeared to be logical and clear-thinking, achievers and sports enthusiasts.

Diversity Within the Fraternity

The actual existence of diversity within the fraternity is often questioned by outsiders. Yet the fraternity men we interviewed frequently stressed this as one of the main advantages of fraternity membership. The discrepancy in perception can be accounted for by a difference in qualities emphasized in the evaluation and distance from the situation. The outsider may be impressed by the commonalities of self-confidence, physical attractiveness, and interest in masculine gregarious activities. If the outsider is hostile to fraternities he might stress commonalities such as bias against "non-fraternity" types, lack of judgment or control in regard to drinking and pranks and a general anti-intellectual and anti-introspective attitude. Fraternity men, taking for granted their common interest in social and athletic activities as average and expectable, are impressed by the variations within fraternity membership regarding geographic areas of origin, social class background and choice of majors. In most fraternities that we studied, the core group was social, athletic and interested in managerial positions or the professions. Few students were interested in the arts, science per se or college teaching. (See footnote 2.)

Diversity Regarding Autonomy

Differences do exist between fraternities and within each fraternity. One difference is the quality of autonomy. Almost half of the fraternity men lived in off-campus apartments and these students appeared to differ somewhat in interests, relationships, self-concept and possibly developmental stage from those who preferred to live on campus. The men who lived off campus appeared to be less interested in sports and more interested in parties, travel and in venturing into "off-beat" places. They were more inclined to read fiction and to participate in civil rights activities. Both groups of fraternity men were relatively disinterested in attending museums, plays or symphonies.[5]

Although not very different from the men who lived on campus, the off-campus fraternity men appeared to have more complexity in their relationships with others. They reported a greater frequency of crises in relationships with others, awareness of problems in others, problems within their own families and problems connected with lack of academic success.[6]

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[5] Table No. 5

Activities Engaged in by Fraternity Men (1)

	Frat/On (N=69)	Frat/Off (N=45)
Spectator Sports	75%	57%
Participant Sports	65%	57%
Social Activities, Parties	71%	80%
Reading Non-Fiction	45%	50%
Travel	45%	43%
"Off-Beat" Interests	04%	09%
Reading Fiction	30%	39%
Civil Rights Near Campus	00%	05%
Creative Expression	10%	14%
Museums, Drama, Symphonies	06%	07%

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[6] Table No. 6

Fraternity Men Attributing Change to Problems
(Described as having "Great Influence" during
their last 3½ years of college)

	Frat/On (N=69)	Frat/Off (N=44)
Crises in Relationships	10%	20%
Problems in Others	19%	20%
Problems in Family	04%	11%
Lack of Academic Success	12%	16%

Although both groups of fraternity men indicated that they had dated more frequently during the entire four years of college than had other groups of men, the off-campus fraternity men felt that they had deeper relationships with women students and indicated twice as frequently that they had enjoyed "high" intimacy with women. In addition, the off-campus fraternity men attributed changes regarding attitudes and behavior to the influence of women students with greater frequency than did the fraternity men who lived on campus.[7] This might indicate that the off-campus men were at a stage in their heterosexual development in which closeness to women had more significance than masculine gregariousness.

Being away from home was described as an important factor causing change for only 18% of the off-campus fraternity men whereas 40% of the fraternity men who chose to live on campus attributed changes to this adjustment. ($p < 05$.) The on-campus fraternity men gave the interviewers the impression of being more conservative and conforming. They showed considerable interest in social activities connected with churches, were very active in athletics and appeared to enjoy participation in student committees and campus politics.

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[7]

Table No. 7

Relationships with Women

	Frat/On (N=69)	Frat/Off (N=44)	Eating C. (N=37)	Off-Campus (N=44)	Dorm (N=42)
No. of seniors dating 2 or more times a week	55%	50%	43%	33%	24%
No. indicating high sexual intimacy	20%	43%***	27%	36%	17%
No. having deep relationships with women	60%	73%	65%	55%	55%
No. attributing change to closeness with women	43%	57%*	43%	39%	21%

Question re: sexual intimacy: Between Frat/on and Frat/off = $p < .001$***
Question re: attributing change to closeness with women:
Between Frat/on and Frat/off = $p < .05$*
Between Dorm and Frat/on = $p < .02$

The fraternity men who lived off campus showed little interest in affairs connected with churches or in campus politics.[8]

These differences would suggest that the two groups of men differed in a feeling of independence and in the timing of their developmental tasks. Possibly the off-campus men had moved more quickly in emancipating themselves from their homes and toward heterosexual involvements. On the senior questionnaire, the two groups did not indicate much difference in their evaluation of changes that had occurred during college although they had attributed different reasons for whatever changes had occurred.[9]

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[8] Table No. 8

Activities Engaged in by Fraternity Men (2)
(Percent who answered "Frequently")

	Frat/On	Frat/Off
Church Attendance or church connected activities	20%	9%
Student Committees	19%	16%
Campus Politics	12%	7%

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[9] Table No. 9

Fraternity Men's Self-Evaluation of Areas of Change
(Rated as changing "Much")

	Frat/On (N=69)	Frat/Off (N=44)
Intellectual Interests	57%	58%
Efficiency as a student	40%	45%
Freedom to express feelings	42%	36%
Personal characteristics	29%	32%
Religious views	20%	19%
Political views	22%	19%
Kinds of friends	22%	20%
Moral views	20%	11%

In addition in a section requesting write-in answers which was filled in by a smaller number of students the distribution was as follows:

Increased self-awareness and understanding	14%	14%
More stable	8%	16%
More self-confidence	13%	16%

A question dealing with feelings of self-satisfaction indicated that the fraternity men and the unaffiliated men living in off-campus apartments had the greatest feeling of self-satisfaction upon matriculation. When the fraternity men first arrived on campus the social education they had received at home stood them in good stead in making new friends. Besides that, they had a back-log of several years of enjoying an image of themselves as recognized leaders in their high school communities. Many of them also had the satisfaction of knowing that their parents were prominent and well-educated. With the influx into the university of many students who are pioneers in higher education, the freshmen who were sons of alumni here or at other prestigious universities may have had a greater sense of familiarity and belonging than did students who were first generation in this type of institution of higher learning. Except for academic pressures, most fraternity men were relatively "self-satisfied" as freshmen. Within the fraternity group, however, the off-campus men had been less self-satisfied upon entrance. Over the four years, the fraternity men as a group moved in the direction of feeling more dissatisfied with themselves.[10]

Diversity Regarding Socio-Economic Status

Another claim concerning diversity that is often put forward by fraternity men deals with existence in fraternities of men from different economic and social classes. In our interview sample the thirteen "Inheritors" were sons of men who held important positions in business, the professions and military life. These fathers were graduates of well-regarded universities and their homes usually were in the suburbs of our major coastal cities.

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[10] Table No. 10

Self-Satisfaction as Freshmen and as Seniors
(Ranked as seniors)

"Which of the following described how you felt about yourself as a freshman? as a senior?"

	Clubmen (N=37)		Frat/On (N=69)		Frat/Off (N=44)		Dorm (N=42)		Off-Campus (N=45)	
	Fr.	Sr.	Fr.	Sr.	Fr.	Sr.	Fr.	Sr.	Fr.	Sr.
Quite satisfied	14%	16%	25%	13%	28%	5%	15%	10%	25%	9%
Moderately satisfied	30%	54%	51%	54%	39%	66%	48%	57%	45%	59%
Quite and very dissatisfied	46%	24%	23%	32%	34%	30%	36%	31%	23%	25%
No response	9%	6%	---	---	---	---	---	---	6%	6%

The Inheritors

The following examples are representative of others within the "Inheritor" sub-group. A task-oriented, pleasant, rather tense young man from a military background who joined a "straight-arrow" fraternity was described as follows:

> "His fraternity brothers admired his sincerity but found him too conservative in his sense of duty which restrained him from joining others in impromptu seeking of new experiences." "Everyone likes him but few get close to him."

Although he liked his fraternity brothers and chose them because he wanted to be with people "like myself," he also felt:

> "They're out for a good time; I have long-range plans and have to work for them."

By his senior year, his fraternity brothers had helped him "ease up" and he was enjoying an occasional "evening on the town."

A wealthy West Coast student whose intellectual and aesthetic development during his college years was more impressive than his academic achievements commented:

> "I came to college thinking I had to go to college and I didn't think any more about it. I never thought about a career or why I was here. Both of my brothers had gone here but I never had a serious discussion with them or my parents. I had a lot of fun, basically. I had a car; I went to the City a lot; went out with a lot of different girls. I didn't care. I have always dated Stanford girls exclusively.
>
> "Once you are at Stanford, you're in a funny position - you either do very well academically, in which case you are satisfied, or if you are average or below, you can't transfer any place else, so you're sort of stuck and have to live with it.
>
> "Sometimes I surprise myself by how immature I am and then sometimes I feel like an adult. I don't know, but I think I've achieved a very high level of education - much higher than I thought I would - in personal matters as well as in broad education. I like people much more than I used to and I have a great deal more awareness of what makes a democracy run - I have more latitude in speaking about world situations and I have more freedom to express my beliefs. I can stand up in social situations and be myself more than I used to be. I think I have more courage to speak out."

A third student, from a well-established and prominent east-coast family joined a fraternity described by a perceptive woman student as composed of students deeply interested in international affairs and government. She commented:

> "Their rebellion seems to be directed into fairly constructive channels. It's not so much a personal rebellion against the world; their way of dealing with rebellion is organizing things to deal with it."

Our interviewee described his experiences as follows:

> "Our House is divided into two groups - the group I'm with, we spend a lot of time drinking and having a good time whereas the other group studies a great deal - we profit from this. In prep school, there was a general awareness that was confined to understanding people, social things - this is true here, but it extends to books, subjects. My House places value on 'eccentricity' - we have a larger proportion of interesting people in my fraternity than in the University as a whole - the University attempts to achieve a norm of personality.
>
> "I viewed the freshman year as a year for prodigality which would be followed by years of work. For as I observed and it appeared logical, life is most productive when lived to the extreme no matter what the extreme might be."

According to his plan, after a year of poor grades, heavy drinking and gregarious activities and pranks, this student was able to settle down to serious academic and intellectual achievements and to move toward close personal relationships. Two "Inheritors", among the failures of the fraternity system, seemed unable to "settle down" and they will be described more fully in a section dealing with the dysfunctional aspects of fraternity life.

None of these men were at Stanford on academic or athletic scholarships. None of them were "driven" to maintain a high grade point average. None of them were forced to devote long hours to sports to keep athletic scholarships. If any of them worked, it was a voluntary act necessary for their self-esteem or sociability or to test their ability to get along with other social groups. None of them participated in major athletics, though they were all enthusiastic supporters of varsity and professional athletics. They enjoyed intramural sports, skiing, golf, etc., and liked to keep fit and to compete physically on an informal level. Academically, a number of these students have done well enough to gain admission to outstanding graduate schools, but three of them were within the lowest 10% of their graduating class.

These men accepted their academic inferiority at the university with a grace that might have been difficult for those who didn't feel superior for some reason. One could argue that with our competitive entrance requirements and academic practices if someone has to be at the bottom it should include individuals who have a balancing sense of superiority in some other area.

Although fraternity men disapprove of poor academic achievement a member is not ostracized or condemned for it. Once one is a member, he has a certain security within the group. However, the general tone of the fraternity prescribes playing down the time and effort required for academic excellence. It is all right to get good grades, but not to appear greedy for them, boast of them or to sacrifice friendliness or loyalty in the pursuit of them.

The "Non-Inheritors"

The nine "Non-inheritors" in our interview sample fell into two groups. The first group of six consisted of sons of small-town public school administrators and of successful men in the west coast suburbs who lacked college education. The other three were students who were at the university on scholarships, came from homes where the parents had low incomes, might not be of Anglo-Saxon descent, and had to cope with the problems of serious illness or domestic difficulities. These three "Horatio Algers" were among the hardest working students on campus. Prior to college most of the "Non-inheritors" had enjoyed an active and flattering social life and the adulation which accompanies success in high school athletic endeavors. Because their scholarships covered tuition and little else, these men usually had to work at additional jobs to pay for their other expenses.

In addition to having to devote hours to athletics, hours to fraternity activities and considerable time on extra jobs, most of the "Non-inheritors" had two other types of burdens. One was that they were involved in a dramatic separation process from their own families. The closer they moved in their social activities towards accepting upper middle class suburban values and patterns and the closer they moved toward professional life, the further they removed themselves from the values and way of life of their former friends and family. During college some of these men found themselves in a social no-man's land. It was not longer possible for them to return psychologically to the ways of their parents and yet they had not grasped the nuances and subtleties of upper middle-class social life. As a result these men often complained of feeling depressed. They rarely dated Stanford coeds until their senior year at college. Their pride prevented them from exposing themselves to situations in which they would appear gauche. On the other hand, their relationships with women who were less well-educated and socially self-confident no longer satisfied them.

A second difficulty that many of these "Non-inheritors" encountered grew out of the fact that their high schools had not prepared them for college with the same skill and proficiency that the upper middle class suburban high schools or prep schools had prepared the "Inheritor" students. As a result, many of the "Non-inheritors" had to compete academically with the disadvantage of inferior preparation. Providing for their financial needs, competing academically in spite of less adequate preparation, adapting to a new set of social patterns and values and contending with the emotional pain involved in separation from their former environments were sources of stress for these men. At the end of four years, most of the "Non-inheritors" in our study complained of feeling exhausted and depleted. Some of these men described feelings of depression and others of difficulty in controlling their anger. However, most of them were well on their way to higher socio-economic status and an enriched awareness of intellectual and cultural matters.

The cost of upward mobility seemed to grow greater in relation to the number of steps up the social ladder to be made by the students. For example, one of the "Non-inheritors" whose father lacked college training grew up in an upper middle class suburb and had enjoyed social life at home comparable to the "Inheritors." He was under less strain than most of the other "Non-inheritors." On the other hand, the son of a Spanish American construction foreman who had been educated at a small Catholic school and whose moral and religious values were challenged by his contact with the questioning attitude he found in the university experienced much more pain.

Students from blue-collar families or of foreign parentage were a small minority within most of the fraternities but gave the fraternity men an opportunity to know at least one or two individuals from very different backgrounds who were attempting to achieve upper middle-class status. In the fraternities there were usually one or two members of minority groups. These "exceptions" to prove the rule did not disturb the homogeneity of the fraternity very much for two reasons. First, their number was very small and, second, minority group members who were pledged by fraternities appeared to have somewhat the same qualities which distinguished the fraternity men in general - namely self-confidence in social matters, attractive appearance, physical energy and good physical coordination.

Other Areas of Diversity

In addition to differences in autonomy and socio-economic status, within each fraternity there usually appeared to be at least one or two students of various types. There were students who were very much interested in campus activities; there were some who primarily were interested in getting good grades; there were others who were distinguished by being favorite escorts in the "deb" circuits; there were individuals who were recognized as hard drinkers and capable of wild, destructive behavior; and here and there appeared students who were frankly interested in intellectual matters. Although almost all of these types of students were represented within each fraternity, there were some fraternities which had a preponderance of one or two types of individuals. Two extreme groups will serve as illustrations. One is what is described as a "straight-arrow House." Here the men were more apt to be church-going, to limit their drinking, to be interested in achieving good grades and to prefer masculine company with occasional forays into the world of women. At the opposite extreme was a house known as a "wild animal house". Here the members seemed to try to outdo one another in exploits of heavy drinking and contempt for individuals with interests in aesthetic, artistic or liberal matters. They delighted in agressive behavior toward women and in dangerous or destructive activities.

Thus the claim of the fraternity men that there is diversity within the fraternity lies in the fact that men do join fraternities from a variety of socio-economic backgrounds, do aspire to a variety of careers and occupations and come from different geographic areas. There also is variety in behavior and values. However, the impression of lack of diversity appears to be due to the general interest of most of the fraternity men in physical appearances, athletic prowess and social activities. In addition there appears to be a predominance of men in fraternities who are interested in learning how to work with groups of people and who look forward to taking positions of responsibility in business, military life and the professions.

Dysfunctional Aspects of Fraternity Life

Interviews over the four years with twenty-two fraternity men indicated some of the areas where the fraternity system, as it existed, impeded personal development of the members and encouraged resistance to the intellectual and cultural values of the university. Some of the students found the continuous round of social and athletic events to be a burden when added to the academic demands of the school. For some, this provided a tempting escape from the discouraging task of academic competition. Simulating carefreeness or a "hangloose" attitude was less disturbing to their self-esteem than admitting inability to compete successfully.

Gregariousness within the fraternity often encouraged superficiality in relationships and values and a blunting of perceptions. Fraternity men, in the interest of group solidarity, were expected to act in a friendly and loyal way towards 40 to 60 men with whom they had daily association. To maintain good-natured acceptance of a large number of individuals with varying patterns of behavior required self-discipline. Some students experienced considerable strain as a result of inhibiting their critical or hostile reactions. Provisions existed within the fraternity way of life for relief of tensions through athletics, heavy drinking and pranks. Outbursts against a "brother" for tabooed behavior (i.e., offensiveness to another "brother's" date) occasionally occurred but a more frequent displacement of aggressive feelings showed itself in disparaging remarks and occasional attacks on those in the "out groups".

Aggressive and Regressive Behavior

Although the majority of the fraternity men in our interview sample never or rarely participated in anti-social behavior, they often acquiesced by non-interference. The interviewees whose behavior had been most aggressive were students with considerable anxiety about survival in the university community. These students had had difficulty in controlling their impulses prior to matriculation and often their fate at the university appeared to them to presage rejection by their homes and communities. The puppy-like exuberance of a group of vigorous males looking for fun would often stimulate such "brothers" to step over the limits of appropriate behavior. Comments by some of the students allude to such situations:

By a "Horatio Alger":

> "I enjoy going to fraternity parties. You could say that this was for letting off steam; gaining experience in what parties were like and being able to look back and chuckle over it. Parties aren't wild to the point of maliciousness, y'know. There isn't as much destructiveness in our fraternity as in others - ours is relatively calm, conservative - we have guys who have been destructive - really malicious so when they got drunk I had to deal with them as president of the fraternity, but not as much as in some of the fraternities where the presidents have something every day - breaking things, hitting people. I have destructive problems about once a month. Gross behavior with girls isn't much of a problem in our house - we have our parties and date girls and get our pleasures, but we don't make a big thing out of what is called "grossing a girl" - people in our fraternity agree that this is a childish way."

By an "Inheritor":

> "I don't like to get raucous and out of hand at parties. I don't like to make a fool out of myself. Destructiveness turns me off. So does obtrusiveness and getting in my way

> generally. The trouble with the two houses nearby which I consider 'animal houses' is just this. We had $1500 damage done to us in this year - B-B guns shot through plate glass windows twice; somebody threw a tire pump through the window - tire pump and windows ruined; exotic plants uprooted; skis stolen and destroyed; this is unforgiveable. I would like to see these guys sent to the penitentiary. I don't care if the guy is a straight "A" student, has the world's greatest girl friend, I don't give a damn. I'd like to send him up."

Another student described a not uncommon phenomenon which defies common concepts of manners and includes a waste of time and money. A graduate student living in the House had expressed contempt for the brothers and they felt he had earned a retaliatory "compliment."

> "And so we had a food fight in his honor - we put him against a door and just smashed food at him - we don't have food fights too often - just every now and then when it's appropriate--the guy had said he was amazed at some of the things we did - it clashed with his idea of society. The brothers have food fights sometimes - they are always trying to find some way to escape their feelings of tension."

One can only speculate why intelligent young men from privileged backgrounds and with potentialities for success would need to actively or passively engage in such "inhibitional releases." Speculation is necessary because capacity for thoughtful introspection and communication about complicated motivations was not one of the characteristics of most of the fraternity men we interviewed. Some of them learned this complicated skill gradually throughout their college years first by discussing values with their men friends and later by trying to explain their feelings to their women friends. Early in their college careers, many of our students resisted discussing motivations or openly indicated that they disliked the process of analyzing their behavior or that of others. This avoidance lead to a lack of subtlety and complexity.

A first speculation is that there may be a permissive attitude on the part of parents, some women friends and even some university authorities. The reason that the pranks sometimes went beyond mischief might reflect the feelings of anxiety that the men had about their inadequacies and their tendency to "act out" rather than "think through" periods of discomfort and lowered self-esteem. The traditions of the "Wild West" and the physical energy of these men might also have played a part.

Rebelliousness may be another factor. They often came from ambitious, hard-working, sometimes fundamentalist families and anticipated comparable lives. The college provided a brief interlude when they felt free from feminine restraints and adult responsibilities and some students like the "Horatio Alger" seemed to want to collect and store away incidents of carefreeness and abandon which could be viewed with nostalgia in the future. The fraternity men were more interested in quickly establishing homes of their own than the non-fraternity men. Whereas all of the fraternity men hoped to be married by age 28, 11% to 14% of the men in other groups did not expect to be married by that time. When asked about fourteen important post-graduate values, the fraternity men rated "future family" and "love and affection" as among the first three most important factors more frequently than did the other men. (See Table 12) In other words, it is as if these men have conformed to familial demands in the past and expect to accept responsibilities as heads of households and community leaders in the future. At college, they may have sensed a fleeting opportunity to rebel against care of property and concern for community approval.

Attitudes of Social Superiority and Reaction to Lowered Self-Esteem

As indicated by their expressions of self-satisfaction, the self-esteem of many of the fraternity men was higher than that of men in the other groups upon entrance into college. They had been the heroes of an earlier stage in adolescence. Some of them had an elitist self-image because of their physical prowess and good looks. In addition, others conceived of the affluence and social position of their families as placing them in positions of superiority. A socially ambitious "Non-inheritor" whose family had wealth commented as follows:

> "I could admittedly lead a terribly double-faced life - what I do and what I want somebody else to do are not at all the same. Anything I'm involved in, I can condone - yet if I wasn't involved in an all-night affair - gambling, etc., and it might look really wild, I might say, 'they're a worthless bunch of people anyway: and if they just 'kiss off' class the next three days and rest up -- I could knock it. But if I did it here with my group of friends and was at a thing that was a complete inhibitional release which was a tremendously gross affair, I'd condone it as just that - and it wouldn't bother me." (A friend to whom we sent a questionnaire commented: "he tends to be over-critical of people who don't look 'cool' and overimpressed by those who do. Perhaps one could say he is a conformist, determined to be in the 'in-group' whatever the cost to values.")

At another time, he said:

> "My parents want me to get good grades but they would rather see me having a good time and not getting good grades than getting all "A's" and not enjoying myself. They keep impressing me that these are the most fun years and I should mix - and half of college is who you meet and how you get along with people."

Thus, many of the fraternity men may have entered the university with high self-esteem based on a feeling of being élite because of their good looks, athletic prowess, and family position. Two elements in the university environment, the faculty and some women students tended to discount these qualities as major virtues. The faculty admired and rewarded skills in abstract thinking and communication, and men in other groups appeared to excel in these areas. The practice of admitting two to three times as many men as women brought into the university community women students who were often superior to the men in areas of academic and social competence. They were in a favorable position in regard to the laws of supply and demand, and frequently made it clear that they wanted men who not only were out-going and fun-loving but also intellectual enough to discuss ideas, aesthetic enough to share cultural interests and introspective enough to discuss and understand their own personalities and those of the girls. So some of the fraternity men found themselves working harder than formerly at academic tasks and getting less recognition at the same time that feminine approval was more difficult to obtain. Their feelings of adequacy as men and their feelings of self-respect as achievers were challenged by the university environment.

Some men had the resources to develop the new skills valued by the university environment but others only became more anxious and reacted by acting out. Some of them bolstered their self-esteem by depreciating other people. Included were those who appeared to them to be less manly, less physically courageous and less loyal to traditional leaders and ways of doing things. A few students escaped into hard drinking, destruction of property, fast-driving and sexual exploits, all of which were exhibited for the amusement or attention of other fraternity men. Frequently, these poorly adapted men failed to survive at the university, but their activities served to provide anti-fraternity ammunition for those who had felt the brunt of the elitist attitude of the fraternity men or envied them their solidarity and ability to enjoy leisure.

Some fraternity members expressed strong aggressive feelings toward students who dressed unconventionally or took liberal or radical stands. The more violent expressions appeared to come from students who were having a great struggle controlling their impulses in general. Comments from some of these students are as follows:

An "Inheritor":

> "The people who are banning fall-out shelters are asinine. People who wear "Peace" on their lapels are dregs of society. They think they are cool; they think they are modern; they think they are beatnik; I don't want to know them. Fall-out shelters on campus were thought out seriously by the University. Students like to bitch about it because they feel cool."

This student did not survive at Stanford and neither did the following one and the violence of their comments should be viewed as those coming from men who had been failures of the fraternity system.

> "This brings to mind the business that is going on in Berkeley. And I think every one of those guys should be kicked out of school. I think education is not a right, it's a privilege. Students ought to be able to get the education they came for. I think the administration at Berkeley didn't know what they were doing. The student's weren't in the right but the University kind of kissed it off."

An "Inheritor" who barely survived the academic competition commented:

> "I think the FSM movement is disgusting, I don't like - I don't mind sit-ins, walk-ins, strike-ins. I would do it myself. But when it interferes with the lives of other people. There is recourse to law and it should be used - and anyone who takes the law into their hands is creating havoc."

Most of the fraternity men we interviewed were conservative but attempted to be tolerant in their opinions and controlled in their behavior. They indicated an openness to new and liberal ideas if they were presented to them in a rational and convincing manner. Because of their respect for authority and their reliance on interpersonal contacts rather than reading and introspection, they were influenced by professorial comments. Many of the fraternity men indicated that the four years of college led to important changes and taught them to be more liberal. Higher scores on scales of psychological tests dealing with social maturity and developmental status and lower scores on the "E" and "F" scales seem to confirm their self-evaluation. (See Table 11.) However, this did not necessarily involve them in restraining the minority of fraternity members who tended to "scapegoat" liberal or unconventionally dressed individuals. Possibly the tendency toward uncritical

Table No. 11

Psychological Test Scores as Freshmen and as Seniors
(OPI; E; f, 1961 and 1965)

Fraternity On-campus (N=48)

	1961		1965		
	M	SD	M	SD	t
SM	52	8	57	10	3.22**
IE	48	10	50	10	-
SF	47	11	44	9	-
MF	50	12	47	14	-
ES	49	10	51	10	-
DS	50	9	59	11	4.10***
F	110	22	99	25	2.21*
E	56	19	46	16	2.91**

Fraternity Off-campus (N=26)

	1961		1965		
	M	SD	M	SD	t
SM	46	10	55	11	2.91**
IE	48	9	51	9	-
SF	47	11	45	10	-
MF	51	7	46	11	2.05*
ES	46	8	51	10	2.05*
DS	47	7	57	9	4.60***
F	119	17	102	24	2.99**
E	62	18	51	17	2.36*

Eating Club On-campus (N=14)

	1961		1965		
	M	SD	M	SD	t
SM	50	10	60	6	3.26**
IE	47	10	52	10	-
SF	48	8	45	11	-
MF	48	7	50	10	-
ES	53	9	55	8	-
DS	46	12	59	9	3.09**
F	116	21	94	15	3.10**
E	57	20	43	11	2.40*

Eating Club Off-campus (N=15)

	1961		1965		
	M	SD	M	SD	t
SM	50	10	61	9	3.18**
IE	50	11	57	9	-
SF	50	9	49	10	-
MF	51	6	49	11	-
ES	51	12	58	10	-
DS	50	12	63	9	3.64**
F	114	24	91	28	2.40*
E	52	17	41	18	-

Stern (N=26)

	1961		1965		
	M	SD	M	SD	t
SM	49	14	55	11	-
IE	44	9	46	10	-
SF	49	8	44	9	2.34*
MF	50	13	53	14	-
ES	52	11	50	12	-
DS	46	13	55	13	2.42*
F	107	34	89	29	2.03*
E	51	17	42	17	-

Off-campus (N=24)

	1961		1965		
	M	SD	M	SD	t
SM	52	11	60	10	2.62*
IE	49	11	54	9	-
SF	49	10	47	10	-
MF	52	7	46	10	2.69*
ES	52	11	53	11	-
DS	51	12	62	11	3.35*
F	105	24	87	25	2.68*
E	50	18	41	19	-

*p. $< .05$; **p $< .01$; ***p. $< .001$

SM=Social Maturity, IE= Impulse Expression, SF=Schizoid Functioning, MF=Masculinity-Femininity, ES=Estheticism, DS=Developmental Status, F=Authoritarianism, E=Ethnocentrism acceptance of the behavior of others within the "in" group and their own latent hostilities toward less traditional individuals prevented them from helping the more hostile brothers control their aggressive feelings.

These same factors may have prevented them from interfering in incidents of offensive behavior toward some women. Although this will be discussed more fully in future publications, the ambivalent attitude toward women evidenced itself in many ways. Especially early in their college careers, the main interest of the men appeared to be in establishing themselves as accepted members of a male group. At this time, they tended to view women partly as potential sources of restraint and partly as accessories to prove their attractiveness and manliness to other men. Women were admired if they were pretty, fun-loving and non-judgmental. Later in their development, some of the men, through the efforts of specific women, became more comfortable with their masculinity and their women friends' femininity and were able to enjoy intimate and close relationships based on mutual acceptance of each other as individuals. For others of the men, difficulty in getting dates and overt disapproval by women of the mens' aggressive behavior or impersonal treatment led to resentment. These men reacted by engaging in derogatory gossip about women students. Sometimes they viewed at a distance and discussed as sexual objects the women who they were not able to date and sometimes they boasted about actual or imagined exploits with those they could. Occasionally the unpleasant phenomenon of "grossing" a girl took place. This infrequent occurrence involved treating apparently masochistic or intoxicated girls in a dehumanized or degrading fashion. This usually involved groups of men exhibiting to each other their willingness to degrade women and themselves.

Atmosphere Favorable to Heavy Drinking

Drinking appeared to be a frequent activity among Stanford men, and Stanford fraternity and off-campus men described themselves as getting drunk more frequently than did men in the Dorms and Eating Clubs. (See Table 4.) They described the reasons for drinking as providing relaxation, liking to "get high," and enjoyment on dates and special occasions. In addition, some students found it a way of relieving tensions and coping with bad moods.

Interviewees and other informants indicated that many students showed movement in being less involved in exhibitionistic drinking in their senior year than characterized the first two years of college. In some fraternities, and for some men in all fraternities, drinking was an activity integrated into their personalities. Some of these men enjoyed a beer or two "with the boys" and a couple of drinks at parties; and some were heavy but controlled drinkers. Although the fraternity culture encouraged drinking, students who did not care to drink heavily were free to follow their own value systems. In fraternities, occasional drinking was common behavior for many students and there even existed small clusters of abstainers. A woman student commenting about her fiance's choice of fraternity said:

> "John's first choice of fraternity wouldn't take him because he doesn't drink. We think it's silly to have something to drink when you don't enjoy it. John explained this to another fraternity that interested him and they kept inviting him back and he joined. It has worked out well. There are a few others in the fraternity who don't drink. We think we have a better time at parties than the people there who drink."

Another student was an example of an occasional drinker. When he joined his fraternity he felt that there was no pressure to drink. He enjoyed a drink or two at a party but otherwise abstained. By his junior year he felt that fraternity brothers would "notice" if he didn't have an occasional beer after studying, and had no reluctance to comply with this sort of pressure. However, when upon his 21st birthday, he was expected to drink 21 beers at a sitting, he rebelled:

> "A couple of times I've drunk too much beer, but never that much. If I feel like doing it, I'll do it. But I'm not just going to do it because I have to. A lot of us turned 21 over the summer and were supposed to go out to the T....., and I didn't want to and that was that. I didn't want to waste the whole next day feeling bad. If I wanted to get out and drink 21 beers that would be one thing, but I wasn't going to do it just because I was expected to. One time when they came back from doing this same thing to another guy who turned 21, they came back and took my bed from underneath me and dumped it in the lake. The lake is dry so it didn't matter. It didn't get me nervous. There was some talk that my bed would be dumped every time they went out and I didn't, until I drank my 21. But nothing like this has happened since. I took it in my stride."

For other students, drinking was an escape or necessity. The student quoted below probably will not have much of a problem with his heavy drinking whereas the second student may be in considerable danger.

> "I drink because I enjoy it. I've never gotten so drunk that I couldn't control myself. I never have had

> to be driven home. I remember being depressed about a girl or school and going out and tying a good one on. Generally, it loses its attraction once you start drinking - at least it does for me. As you drink you get more depressed or there's something wrong - and it isn't achieving that much. I drink because I like to drink. I have a large capacity but I rarely try to fulfill it."

The next student with family and academic problems as well as a fear of becoming an alcoholic, commented that when he was displeased with anything he got "smashed." He had two accidents while driving and knew that he drank in excess of what he should. In discussing excessive drinking, he commented:

> "The problem stems mostly from fellows just seeking an escape - that's the easiest thing to do and probably the most fun. It's a question of how disturbed you are. A lot of people, if they work for something and then don't quite get it, get very disturbed - it takes time for something like that to wear off. When you get smashed the feelings don't wear off, but your interests change and you don't think about it - it's not a question of forgetting, you just don't worry so much about it - you think of other things. Granted I like to get smashed. I think it's fun. Not to the extent that you get out of control - but to get a good buzz. It's a lot of fun. I made a New Year's resolution that I wouldn't drink from Sunday to Thursday except on Thursday after I got all my assignments done."

Most of the fraternity men whether they drank lightly or heavily did not consider drinking as a problem. However, if a person was in danger of becoming a problem drinker, the pressure of fraternity life for frequent masculine conviviality, the easy availability of liquor and the round of parties and dates provided little protection against their becoming problem drinkers. Many of the fraternity men indicated that friends or family members had drinking problems.

In summary, some of the major dysfunctional aspects of fraternity life included excessive demands for group participation and encouragement of simplistic concepts of masculinity. At times, acting out of primitive aggressive and sexual impulses was covertly or overtly encouraged. "Scapegoating" of students who dressed unconventionally, took liberal stands or were absorbed in intellectual or aesthetic activities was not uncommon for some fraternity members. Such activities have aroused strong feelings of disapproval both outside and within fraternities. Within fraternities revolt against "elitist" biases has led some fraternities to withdraw from national organizations that enforce restrictions on pledging members from minority groups. Resentment of a concept of masculinity involving sado-masochistic aspects has led to elimination of hazing practices. In other ways, "brothers" have attempted to evaluate the assets and problems of fraternity living with the hope of eliminating some of the latter. It is argued that the fraternity way of life has value for some students at certain times in their development and the next section will focus on the functional aspects of fraternity life.

Functional Aspects of Fraternity Life

The fraternity also facilitated some of the developmental tasks of the students. The information obtained from our twenty-two interviewees lead us to infer that the fraternity may have aided them in the separation process by providing a not too dramatic break from home living. In contrast to the impersonal environment of the freshman dorms, the fraternity offered the students a sense of belonging to an in-group (like a family), a feeling of security and a housing arrangement that afforded more continuity with their previous experiences than did the dormitories.

Assistance in Transition to University Life

The functional aspects of the fraternities appeared to these students as providing a continuity of experience in group activities which had given them pleasure in the past and enabled them to move emotionally from their home community to their new university community.

The comments of a student from a small town summarized the reasons given by other students for joining a fraternity:

> "I joined a fraternity mainly because it's a chance to get to know more people better. In the dorms, I go around with a clique of 8-9 people. But it's not that easy. People in the dorm seem to feel like "you leave me alone and I'll leave you alone." There doesn't seem to be a great desire to get out and build friendships that there is in a fraternity. My two close friends joined the fraternity with me. They're interested in someone else and not themselves all the time. They like to have a good time and they're interested in school, too."

Many of these students had reacted to the universal freshman dormitory experience by quickly becoming part of an informal, friendly clique; by assuming positions such as social chairman or athletic chairman for their house in the dormitory; and in trying to get dates in spite of the difficulties freshmen men have in dating Stanford girls. By the time of "rush" most of these boys had spent considerable time finding friends who enjoyed athletics, camaraderie, dating or drinking. Their behavior in the dorms prior to rushing and their behavior during the rushing experience indicated that they wanted the advantages of being part of a defined group of men and that they were willing to pay a price for this opportunity. They were willing to direct some of their aggressive and individualistic tendencies as prescribed by the fraternity. Also implied was a willingness to assume a "brotherly" relationship with 40 to 60 men and this involved some sort of daily commitment to a large number of people for several years. In many houses, opportunities were provided to get to know a number of men well by devices such as the quarterly change of roommates. Also, fraternity living provided opportunities to get to know upper-classmen and "learn the ropes."

Protection Against Feelings of Disintegration

Earlier we discussed some of the problems arising out of a lack of critical attitude among fraternity members, but there is another side to that coin. When the individual fraternity member contracted to be friendly and loyal to his "brothers" he could expect this to be reciprocated. This sort of arrangement sometimes proved to be protective insurance against factors in the university environment which tended to make students feel insecure and unworthy. Although relationships between fraternity men were often more reserved than intimate, the factors just described tended toward giving them a sense of security. Except for "marginal" men moving rapidly up or down the social ladder, fraternity men rarely complained of feelings of alienation or diffusion.

One could say that these painful experiences did not accrue to these students because they ventured so infrequently into experimenting with new ideas and new experiences. The traditional values of the fraternity system and the "high-school" pattern of same-sex relations may have slowed the process of change for some of them. However, there may have been an additional incentive for this slowing of the process of change, especially for those who were under unusual academic pressures. To the extent to which the aptitudes and interests of the fraternity men were not as syntonic with the demands of the university environment as were those of more intellectual and verbally skilled students, the security and the group identity provided by the fraternity may have provided a support for their self-esteem which enabled them to proceed with their educational tasks. Dr. Helene Deutsch speaks of group participation among younger adolescents as providing an opportunity for peer-approved regressive behavior in the service of slowing growth so that disintegration can be avoided and progress eventually abetted.[11] Thus, even some of the regressive aspects of fraternity living may have had functional value for students who needed relief from the strains of moving too rapidly toward independence, heterosexual mutality and confrontation of the differences in the values, ideas and behavior of people.

Assistance in Achieving Heterosexuality

The task of moving in a voluntary and independent way toward seeking out feminine companionship is one that caused considerable anxiety for men students. This was true even for men who had much experience in dating during high school. (This may have been due in part to the fact that the high school environment had been less demanding and the students at a different developmental stage.) Asking for dates and venturing toward physical contact was an anxiety-laden experience for many of these men. Such movement is fraught with potentialities for confrontation with ambivalent feelings about mutual dependency and commitment, and for rejection and lowered self-esteem. As we have indicated, the self-esteem of most freshmen and sophomore students is not very sturdy. With the support of fraternity brothers and with the aid of planned social events, the task of making arrangements for social life with girls was facilitated. In light of the men's fear of rejection and actual experiences of rejection, some of the derogatory behavior towards girls becomes more understandable. But in spite of these anxieties, most of the men were helped in moving away from isolation or exclusively same-sex relationships toward comfortable and pleasant group activities or casual relationships with women. Other men were able to move toward more personalized and mature relationships.

Environment Conducive to Relaxation, Dependency and Helpfulness

Another advantage of the fraternity was the opportunity the system provided for non-competitive or mildly competitive physical activities. The fraternity men, more than others, appeared to be physically vigorous and energetic. College athletics are too time-consuming or competitive for many students, but the informal and easily available athletic activities connected with the fraternities provided an important outlet for men often not too well adapted to a sedentary life. Besides providing frequent and informal outlets for physical energy, the fraternity is one of the few institutions on campus which seriously concerns itself with the need of young people for fun and relaxation. This is important in light of the many demands made of students to question their values and goals and to compete in a demanding academic and social environment.

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[11] Monograph in preparation. Paper presented on November 6, 1966 in San Francisco under the auspices of the San Francisco Psychoanalytic Institute.

Descriptions of life within the fraternities provided some of the few examples given by men of commitment and helpfulness to others. By joining the fraternity, they had indicated a willingness to be depended upon and the right to depend upon others. This was in contrast with men in other groups who seemed to avoid mutual dependence. The fraternity man had opportunities and was expected to show friendliness and helpfulness and to receive it. Because of continuity and propinquity, a fraternity man had opportunity to perceive pain and pleasure in others and have his own perceived by them. When incidents such as illness occurred to a fraternity man, he could count on numerous hospital visitors, assistance with assignments and other services. Most fraternity houses provided study tables to aid students who were failing and one acceptable excuse for non-participation in group activities was academic failure or problems. One student commented on the help he got from fraternity brothers as follows:

> "And they're helping me out as far as grades go. I like the House very much and they wanted me as much as I wanted them and we just kind of made an agreement - that - I told them that my grades had to come first and they agreed and they're doing all they can to help me. And I think this will help a lot too, this quarter even, because now I get all my English papers graded once before I turn them in and then I rewrite them. And they help me with my math and anything that I have problems with. In general, I can go to the House and I can find an expert somewhere along the line. There's two fellows that I know that are English majors and you know, they don't grade my paper but they go through it and tear it apart and then I can go back through and correct it."

He had come to the university from a small town and had many problems in adjusting to a more sophisticated and intellectual milieu. In addition, his athletic scholarship required long hours of practice. He attributed his survival at the university to the comfort and help he received from his fraternity brothers. In common with some other athletes and fraternity men, he expressed feelings resembling those of being persecuted when he described the way he experienced criticisms of athletes or fraternity men.

Informal Training in Leadership

Another functional aspect of the fraternity is that it offers informal training in leadership. Within the fraternity, different individuals aspired to varying levels and types of leadership. These students did not want lives detached from other people and they did not necessarily need to restrict their friendship to one or two close friends. They wanted to and appeared to be able to [illegible] accept a variety of people every day and many times a day and to play as well as work with them. They aspired not necessarily to intimacy, but to more than casual contact with many individuals and groups throughout their lives and accepted the fact that such aspirations involved the necessity to master complex skills. The fraternity seems to have tried to cope with the complexity of teaching these skills by developing certain rituals and definitions describing appropriate behavior and by offering opportunities within the fraternity for taking on tasks that involved varying degrees of leadership.

Innumerable comments of the fraternity men indicated either a willingness or desire to lead others themselves or respect for "brothers" whom they considered leaders. The following comments of a few "Inheritors" are examples.

> "I find myself working harder and getting lower grades than my friends. (His aptitudes are fairly low.) In order to achieve what I hope to achieve I must maintain and develop confidence in myself and self-respect. It takes courage to fly and it takes self-respect and confidence to lead men and impress women."
>
> "I think I have shown substantial leadership qualities within my fraternity and most of my contemporaries respect me for what I am and the fact that I'm willing to speak out at House meetings on any subject when I disagree with others."
>
> "The presidency (of the fraternity) gave me a chance to do something for the House, for myself."
>
> "I somehow get some sort of psychological thing that makes me, kind of forces me, to try to be the leader of a particular group - and if I get to be the leader, I'm not sure that I really enjoy it that much but somehow I just have some sort of psychological thing that makes, kind of forces me, I mean to seek leadership positions."
>
> "I was rush chairman. I learned that the leader must always be optimistic."
>
> "If you are in a position of responsibility, then at least you have to be disciplined. But this does not mean unpleasantness. It is a real challenge to be pleasant when someone has been rude."

The necessity for cooperation in managing a household and planning social and athletic events required the assistance of all of the members at various times. Participation in such activities gave the students an opportunity to learn how much responsibility they were willing and able to take for group activities and what were some of the costs as well as the rewards of leadership. Experiences in enlisting cooperation and loyalty and in avoiding tensions within a group were training experiences for those students who were interested in management or politics.

THE EATING CLUB MEN

The other half of the male student population was divided between those who joined eating clubs and the unaffiliated men who lived either in dormitories or off campus apartments. The four groups differed in their attitudes toward group membership and autonomy. The fraternity men, with their interest in leading and manipulating others were willing to adapt to group demands and to rely on the group for status and support. Often their needs and preferences as individuals were subordinated to group patterns. Eating club men described themselves as more individualistic and less socially sophisticated than fraternity men. However, belonging to a personally selected and formally organized group of men appealed to them and may have represented an effort on their part to move toward more active participation with peer groups than they had enjoyed in high school. The dorm men with their shyness and emotional investment in themselves as workers, appeared to desire minimal response from other men, individually or in groups. The off-campus men appeared to choose a few people as close friends and avoid living with large groups of men either because of their desire for independence or because they were perceived by others as not easily adaptable to group living.

The eating club men considered themselves as following a middle path between the fraternities who operated within a clearly defined system and the dormitory and off-campus men. With this in mind, let us describe some of the salient features of the eating club as an institution. An "eating club" is an organization composed of a group of from 30 to 60 men who live either in off-campus apartments or in a dormitory which does not provide meals. As the name indicates, eating clubs provide facilities for a congenial group of men to meet for meals. In addition, they provide for social, athletic, cultural and service activities. Although the eating clubs have existed on campus for about sixty years, only in the last fifteen years have they had permanent housing. A one-story L-shaped building includes kitchens and all-purpose dining rooms for each of the seven clubs. Together they share an athletic field, picnic grounds, and a common game room. The clubs are open 24 hours a day and provide a place for studying, "kissing-off," and "raiding the ice-box." The clubs are far from glamorous in appearance but appear to be functional and easy to maintain. They are quite similar in appearance and they boast a diversity of membership. During our study, one of them had a large proportion of members who were interested in drama, art and creative writing and could be described as having an atmosphere of great casualness. There were about a third as many clubs as there were fraternities and they had about a third as many members.

Characteristics of the Club Men

The men in our interview sample who joined eating clubs often came from less privileged backgrounds and lacked the self-confidence in social matters which characterized the fraternity men. A number of them had been "good boys" during high school, occupied with academic challenges and less involved or skilled in athletic and group activities than were the fraternity men. Having felt part of a small, intellectual minority during high school, they looked forward to a more active social life during college where they anticipated finding a larger number of students with their values and interests.

Feelings of Disappointment as Freshmen

The freshman year proved to be a great disappointment to our interviewees and the process of separation from home was made more difficult by their discouragement about enjoying a gratifying social life at the university. Three groups in the freshman dorms contributed to this feeling. First there was a small but omnipresent group of students whose pranksterism and anti-intellectual attitudes served to dampen any tendency on the part of others to exhibit an interest in intellectual or cultural matters. Second, the potential fraternity members were locating each other and grouping together in anticipation of the rushing experience. They tended to exclude students who did not make a "cool" impression because they were reluctant to be thought of as a friend of someone who would not be pledged. Third, the students who were isolated and "booked" all the time presented a distressing alternative to the two examples of sociability which fell far short of the anticipation of most of the eating club men. In addition, the problem of exhaustive academic demands and the danger of low grades further dampened their hopes for a pleasant social life. Almost half of the eating club men described themselves in the Senior Questionnaire as having been very dissatisfied with themselves as freshmen and this was largely due to their disappointment with the social milieu. By their senior year, the social environment was more in harmony with their high school expectations and they had adapted well to the academic demands. For many of them, their experiences at the university began poorly but had a happier ending.[12]

Diversity of Backgrounds and Feelings of Social Inadequacy

The nine club men in our interview sample appeared to be more diverse from each other than did the fraternity men. There were three thoughtful small-town students who had been outstanding for academic skills and leadership in communities with a slower pace and less sophistication than was true of metropolitan areas. They appeared to be more intellectual, less athletic and less social than the fraternity men who had come from small communities. Perception of the superiority of students educated in urban, suburban or "prep" schools was described as follows by one of three small-town eating club men:

> "I'm not what you would call an obtrusive person but I don't completely withdraw into the corner. I don't think I stand out as being a person who is very confident of himself but then again, I don't think I'm timid.
>
> "In HS I was a big man. I kind of came down here with the thought that there would be no problem in college and that I had a pretty good background. When I got down here I found that that wasn't true. From the first I ran into people who had definite ideas about politics and I hardly knew who they were talking about. It didn't seem as if I knew very much. Mainly I realized how much I had missed by coming from a small community."
>
> (Change by senior year?) "I still don't have an idea where I am but I do have more confidence in myself that when I do make up my mind I have a right to say so and feel that way."

Three students had grown up in larger communities and had professionally trained parents who often had strong ethical convictions. Two families were from minority groups as was true of two more that will be described later.[13] The majority of the eating club men in our interview sample viewed both parents as individuals with strengths and weaknesses and attempted to understand them as they were attempting to understand themselves. Sometimes this involved confrontations and conflicts which often lead to greater understanding. The mothers appeared to be active in professions or community affairs and communicated freely with their sons. The remaining three students had egocentricities and problems which made it difficult for them to adapt to group demands but they drifted along in the easy going environment of the clubs. For example, a student with professional aspirations joined a club partly out of awareness of his ineptitude in dealing with people. He hoped to gain more skills in this area. He was described by a friend as follows:

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[12] See Table 10. 46% of the club men had described themselves as being "quite" or "very" dissatisfied with themselves as freshmen whereas 24% of them so described themselves as seniors. Of the five groups they had been most dissatisfied as freshmen and least dissatisfied as seniors.

> "The Club gained a little color when he joined - and he's gained from joining. He's more sociable but not popular enough to hold an office." (Later in his college career) "He's a born trouble maker - a great one for starting malicious rumors and getting gullible associates into hot water. Can be entertaining but does not get along with other club members - he's either tolerated or laughed at."

As mentioned earlier, the clubmen lacked the social self-confidence of the fraternity men. In addition, many of them had been interested in academic matters and good citizenship in high school and had been among the students who delighted teachers and adults with their interest in the problems of the adult world. A graduate student informant summarized many of the qualities of the clubmen as follows:

> "In eating clubs you get compliant, nice, small-town, easy-going, not-too-talkative boys, but if you get to know them you find they're interesting. A familiar quality of the men is quietness. There aren't too many 'Hey, howya doin'' guys. These guys don't go out of their way to slap you on the back. But they do have opinions. A lot of them have thought about things.

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[13] Another student could be described as having "minority status" in the sense of the uniqueness of his being from a family with "upper-status" and with a history of many generations of intellectual and social prestige. He chose to remain "out" of the fraternity culture and disdained many of their values as materialistic and anti-intellectual.

> "As the girls said, they're nice guys, but they aren't sure of themselves. There are probably more virgins in eating clubs - guys without experience. When they "kiss off," they "kiss off" with other guys - go down and play pool, bridge, poker.[14] There's very little drinking in eating clubs - getting drunk.[15]
>
> "A lot of these guys were top in High School: top athlete and top leader. They got here and they had difficulties when they were freshmen - they weren't that socially oriented - you know go out and snow a girl - they aren't like that. They get into Clubs, meet around Clubs - they don't get active on this campus. When they do, they get involved with the radio station or the drama groups."

Intellectual and Occupational Interests

The quality of professionalism was more evident in our interview sample of eating club men than in the fraternity group. Of our nine students, the majority came from homes where the fathers were professional men who practiced their professions. They were recognized for specific competencies based on education and usually were not in managerial or leadership positions per se. Three were lawyers, two were teachers, one was an artist, the seventh was a physician interested in teaching and research, the eight a small business man and the last a white collar worker with a Master's degree. Four of the mothers were employed part or full-time as teachers, one as a social worker and another as a bookkeeper. The club men had the following professional aspirations: four wanted to be physicians with three of them interested in research or teaching; two aspired to be writers, another to be a psychologist and these three also included university teaching as a possibility. Of the two eating club men who were atypical for the interview group, one aspired to business administration and the other to engineering.

Our interview sample (N=7) differed from the questionnaire sample (N=37) in its greater representation of pre-medical students and fewer business and engineering students. In a concurrent study indicating the graduate school the students are attending, the eating club men had a large number of students in business, engineering and fields which probably will involve college teaching or research. The large number of students in business and engineering as well as in possible academic fields suggests the existence of considerable diversity in the eating clubs. The absence of students entering law may be connected with the "quietness" suggested earlier as a characteristic of the eating club men.

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[14] We interviewed the students intensively about interpersonal and sexual relationships at the end of the junior year. Of the 42 men in our interview sample, none of the dormitory men and about a third of the "Inheritor" fraternity men and eating club men had had sexual relations. About two-thirds of the "Non-inheritors" and men who lived in off campus apartments had had sexual relations.

[15] See Table 3, page 300.

Moderation in Social Activities and Academics

Many of the clubmen lacked the "coolness," that is, the smooth, outgoing, apparent self-confidence that characterized many of the fraternity men. The clubmen had not belonged to the most popular crowds in high school although they may have held formal student offices. They were not the "white protestant males from upper middle-class suburbs of our coastal cities" described as the pacesetters for the fraternities (although they may have had one or more of these characteristics). The fraternity men appeared to some of the clubmen like college models for magazine ads, and the girls they were seen with seemed attractive and superficially desirable. Thus in many ways, the club men felt inferior to the able and attractive men in the fraternity group and envied them their group solidarity, manliness and ability to have fun. Although moving toward masculine gregariousness and fun, the clubmen often were far from carefree. In other ways, the clubmen felt indifferent or superior to the fraternity men whom they perceived as lacking idealism and depth of understanding of themselves and the world.

A few words about some of the club men in our interview sample may clarify their lack of "coolness." Three of them were serious premedical students with interests either in research or serving mankind. They yearned for more social grace and ease than they felt they had as freshmen. Two of the three were from minority groups about which they felt somewhat self-conscious. Two other men in our interview sample were potential creative writers and shared a detached and watchful attitude toward everything they experienced. They were sharp observers and skilled in translating into words the impressions they received. The appearance of the first three men may have been overly neat and conventional for the campus, whereas the second two had a casualness which verged on the "beat." Their hair was a little long and one of the students, from a distinguished and wealthy family, usually wore tidy but torn jeans and keds. The other potential writer was from a small town as were several of the clubmen and these small town students lacked the urbanity and sophistication of some of the fraternity men. Possibly because of lack of interest or finances or the knowledge of what was most fashionable and attractive, they were not as well-groomed. Another serious and long-haired student from a minority group was deeply involved in applying his freshman knowledge of depth psychology to understanding his own motivations and those of people around him. Another clubman was a bewildered Negro who had not made much of a social adjustment in his own home community and appeared to understand little about his new college environment.

Previous mention has been made of the avoidance of introspection and aesthetic involvement on the part of the fraternity men and their respect for traditional authority. In the interviews the clubmen appeared to be more introspective than most of the fraternity and dormitory men. They more easily discussed their behavior and relationships with others and their opinions about the validity of a variety of ideals and philosophies. The writers-to-be, the psychologist-to-be and the two of the potential doctors were intensely involved in trying to understand and evaluate what they experienced and to develop their own personal philosophies. They were concerned about questions of integrity and individual responsibility. They often were critical of the adult world, but not necessarily rebellious. They took seriously their responsibility to determine their own values. Their relationships with other students involved discussions of personal problems and clarification of values and feelings. Although career interests and getting into graduate schools were important to them they were also involved with the world of ideas.

In spite of the serious academic and career interests which club men shared with the dormitory men, they were more outgoing than the latter and were interested in a variety of relationships with others. One student whose behavior during his freshman year resembled his perception of the dormitory men commented:

> "Not trying to be 'Number One' has enabled me to broaden my experience, because if I was to drive enough to be 'Number One,' I'd have to take an awfully narrow road. My second quarter here I didn't have a single date; I just stayed in my room and didn't see one movie; I just stayed in my room studying day in and day out. And I came out with a high grade point average. And I decided that this is not for me. Toward the end of the spring quarter, I joined an eating club. I decided, corny as it sounds, that there's more to life than studies."

Interest in Intellectual and Service Activities

A large proportion of the eating club men in our interview sample had felt "different" prior to college because they adhered to adult-approved behavior while many of their high school peers behaved in a more peer-approved way. Most of the clubmen had been serious, hard-working, future-oriented, controlled students. But in contrast to the dorm men they had more desire for fun and popularity. Looking back on his college years, one student, described by a resident associate as: "stable, level-headed but with an excellent sense of humor - quiet, unassuming, not conceited and not evidently aware of his extraordinary abilities" commented:

> "Until recently, doing one's duty and being a 'good boy' were my main goals. Although I still want to be a competent doctor and do significant research, I also want to go to parties, drink with my friends and have some fun while at college. As a result of getting to know more friends, I feel that I have moved from being self-centered to being more interested in others. I am less enthusiastic about knowledge for the sake of knowledge alone; I have moved toward wanting to work with people and do something for them."

This student was an unusually competent person interested in medical teaching or research. He was aware that his relationships with others were characterized by formality and distance and commented that absence of conflict with others may have reflected his reluctance to risk intimacy. The tendency to value intellectual gratifications more highly than emotional relationships is suggested by the following table which deals with seven of the fourteen activities students checked as having potential importance for them after graduation.[16] There was a tendency for the club men, as well as the dorm and off-campus men and in contrast with the fraternity men, to place greater value on "intellectual and artistic matters." They expected to have greater interest in "helping others" than did the other men. To quote one of the students, they might find it easier to "love mankind than men." Their relatively low interest in "future family" and "love and affection," may foreshadow difficulty in achieving intimacy or indicate a gratification from the world of ideas that lessens the importance to them of close personal relationships. Another possibility, which was suggested by the interest in relationships and understanding of other individuals expressed by some of our eating club interviewees, is that although their personal relationships may have been characterized by greater understanding than was true of the fraternity men, they were not as ready as the latter for heterosexual commitment.

Inclination to Change During College

The self-evaluation of the students and the result of psychological test scores seem to indicate that the students in the eating clubs were relatively open to change as a result of the

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[16] See Table 12 on following page.

Table No. 12

Activities and Interests Considered Important After Graduation

(Percent rating the following as first three choices out of fourteen)

	Eating Club (N=37)	Frat/On (N=69)	Frat/Off (N=44)	Off Campus (N=44)	Dorm (N=42)
Career	47%	64%	66%	54%	59%
Activities with future family	33%	62%	45%	48%	35%
Love and affection	32%	49%	55%	39%	32%
Developing a personal identity	22%	29%	43%	32%	26%
Intellectual and artistic activities	35%	16%	18%	33%	33%
Thinking and reflection	27%	17%	22%	25%	19%
Helping others	24%	19%	11%	17%	13%

(The seven items ranked as of first three importance by less than 18% of the Stanford seniors were as follows: "Participation in activities re: national and international betterment"(12%); "Social Life and Entertainment,""Participation as a citizen in affairs of your community," "Religious Beliefs and Activities," "Sexual Needs" (7%), "Sports or Athletics" (3%), "Home Improvement" (1%).)

college experience.[17] Except in regard to "personal characteristics" and "kinds of friends," the clubmen felt that they had changed more than did members of other groups. This may have resulted from a variety of reasons of which the following three are possibilities. In the university environment they may have found enough factors which pleased them to provide gratifications on the one hand and sufficient displeasing aspects to stimulate independent and critical thinking on the other. Second, they may have come to this specific university because of a readiness to change in the direction of greater social sophistication or increased intellectual interests. Third, their capacity for introspection and communication may have enabled them to utilize relationships in the service of personal modifications.

When asked about the reasons for changes that occurred, the clubmen indicated ten out of a possible sixteen reasons with greater frequency than did men in the other housing units. More of them indicated emotional readjustments connected with their homes as being factors of importance. Our interview sample indicates some reasons why "being away from home" may have had the importance it did for some of these men. Many of them had ventured far from home either geographically or in cultural patterns. Our interview sample included a Boston "Brahmin," several students from New York City, several students from small towns, a Negro student, a Japanese student and two Jewish students. For many of these

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[17] Table No. 13

Student Self-Evaluation of Changes in Intellectual Interests, Values, and Personal Characteristics

(Percent Indicating They had Changed "Much" re: the Following)

	Eating Club (N=37)	Frat/On (N=69)	Frat/Off (N=44)	Off Campus (N=44)	Dorm (N=42)
Intellectual interests	68%	57%	58%	52%	38%
Efficiency as a student	46%	20%	11%	18%	17%
Freedom to express ideas	46%	42%	36%	34%	17%
Personal characteristics	32%	29%	32%	43%	36%
Religious views	30%	19%	20%	25%	21%
Political views	32%	22%	19%	18%	19%
Kind of friends	19%	22%	20%	32%	15%
Moral views	46%	20%	11%	18%	17%

Table No. 14

Student Self-Evaluation of Causes of Change During College (1)

(Percent saying the following had "great influence" during college)

	Eating Club (N=37)	Frat/ On (N=69)	Frat/ Off (N=44)	Off Campus (N=44)	Dorm (N=42)	X^2	df	p.
Factors within Self								
Problems in self	51%	45%	45%	45%	50%	.96	4	NS
Gaining self-understanding	65%	58%	45%	55%	45%	4.47	4	NS
Peers								
Closeness to opp. sex peers	43%	43%	57%	39%	21%	17.00	8	*
Closeness to same sex peers	43%	42%	34%	34%	30%	2.24	4	NS
Crises in relationships	27%	10%	20%	20%	19%	14.49	8	NS <.10
Problems in others	30%	19%	20%	20%	12%	8.61	8	NS
Family								
Being away from home	57%	40%	18%	32%	40%	21.11	8	**
Problems in own family	24%	04%	11%	11%	07%	10.53	7	*
Ideational								
Living group	27%	61%	50%	07%	21%	56.40	8	***
Ideas from teachers and courses	35%	20%	30%	16%	26%	13.55	8	NS
Ideas in books	24%	12%	14%	23%	36%	20.71	8	**
Close relations with teachers and adults	16%	10%	14%	14%	12%	7.07	8	NS
Involvement with social, political improvement	19%	09%	05%	0%	14%	13.00	4	*

These X^2 are based on the frequency of response of members of the various living groups in the three response categories resulting in 3 x 5 contingency tables with 8 df. Where the frequency in the great or little category was extremely low, it was combined with the moderate category resulting in 2 x 5 contingency tables with 4 df.

* $p < .05$; ** $p < .01$; *** $p < .001$

students, being in a population of predominantly white, Protestant suburbanities and in a western atmosphere presented a stimulus to evaluate their familiar values from a different point of view. Also, more eating club men indicated "problems in my family" as reasons for changes that had occurred. This may have indicated more family problems or greater interest and perception. Table 14 suggests many interesting variations in the perceptions of men in the different housing-affiliation groups of factors influencing them to change.[18] (See previous page.)

Many of the clubmen had enjoyed closer relationships with other men during college than they had previously experienced. They spoke with enthusiasm, as did men in other housing groups, of long, serious discussions dealing with religion, politics and morality, However, they, more than men in other housing affiliation groups, indicated that changes had occurred in these areas. Change was perceived by them as being most noticeable in the area of moral values. The latter is in harmony with the impression given by our interviewees that a segment of the eating club men had been "good boys" in high school and were eager to become more venturesome and independent as they moved into young adulthood.

Advantages of the Eating Clubs

Club members indicated to us some of the advantages and disadvantages of the clubs. The advantages are, first, that like the fraternities, they provided a group which was small enough for closeness, large enough for diversity and which promised continuity for several years.

Second, they offered group activities for students who were more social and athletic than the dorm students but less self-confident and experienced in these matters than those who joined fraternities.[19] For young men with limited incomes and many

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[19] Table No. 15

Students Who Frequently Participated in Social and Athletic Activities

	Eating Club (N=37)	Frat/On (N=69)	Frat/Off (N=44)	Off Campus (N=44)	Dorm (N=42)
Specatator Sports	43%	75%	57%	39%	24%
Social Activities, Parties, etc.	46%	71%	80%	34%	12%
Participant Sports	35%	65%	57%	27%	09%

academic demands, it was convenient to have inexpensive and regular social activities arranged for them:

> "The main advantage of the eating club is, of course, meals and eating together - social life is pretty good. We pay $20 a quarter for social fees which isn't too high and this means that probably every two weeks there's a party of some kind which you can go to."
>
> (By his sophomore year the same student commented:) "Thank God it's Friday parties" (TGIF) are generally just stag parties where you drink beer, sing and talk in general - sort of an unloosening by the end of the week. In addition, there are the dances and there always is a group that you can go with to the various things around campus - a bunch of boys will get together and go see a movie or something like that. Most of my dating is for club functions."

Another student, nostalgic about his home town crowd, commented:

> "I enjoy going to parties at the eating club because I like to dance and I enjoy drinking. I like the sense of being with a crowd. But I don't have the sense of being at home - I'm being at the parties without real contact. I say 'hello' and things like that but I don't have a meaningful relationship with the people at the party at the time."

Third, there appeared to be greater encouragement of individuality and less emphasis on conformity than in the fraternities.[20] This appreciation of diversity was described as follows by a club president who had lived in a small town:

> "Our club is about as diverse a group as you can find and there are constantly arguments being waged about this and that and it's kind of difficult not to take a stand on something when you can hear the ideas being presented and you know you don't agree with them. These discussion make you want to find out something about the case. I read The Organization Man mainly because of a discussion we got into, talking about Southern California atmosphere and occupations.

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[20] The following expression of statement of aims printed by one club was repeated with minor changes by the others:
"A group may satisfy the gregarious interest of the undergraduate without forcing him to subordinate his personal identity to that of the group."

"And speaking of race relations, I never met a Negro until I came here. (He roomed with a member of his club who was a Negro from a large city.)

"And we have a very conservative fellow - a guy who is practically hated by a lot of fellows because he's like a stone wall. The way I look at him, I think he's good for the club in that he's a stone wall for them to bump their heads up against every now and then."

"We look for fellows who are interesting to talk to, who seem to have something on the ball intellectually and who are involved in some sort of activity so you can gauge whether they'd be active in the club or not. It's awfully difficult to tell and sometimes we even take in some of the fellows who we're not real sure about whether they'd be very active, just because we feel that the other side of that, a quiet person who doesn't involve himself too much, is a good balance in the club. It's pretty easy to find a place for just any one in here because it's a diverse group and we have no stereotypes.

"Our club runs from staid conservatives to raging liberals. There are those who are grinders, I suppose you'd call them educational machines who simply sit there and work their slide rules all the time trying to get the best grades, the grade-grubbers.

"There are those who are always worrying about civil rights, worrying what's going on with poverty and working outside the club in general areas of welfare.

"There are those in the club who are there just to have fun. They don't work hard at grades and they don't work hard at outside activities. They spend their time going to movies or going out or just kind of enjoying life.

"There are the business-men types who are already getting businesses going for themselves and are pretty serious about their studies and don't care about grades, but what they get out of education to benefit them in what they are already setting up.

"And there are athletes, fellows who're pretty devoted to sports; school seems to be somewhat secondary."

Another student commented:

> "I suppose the main thing that I can say about my friends being helpful during college has been in presenting different points of view. In the eating club, you get a large number of people together, you're going to get varying opinions on something and so I wasn't just getting an athlete's view all the time, or a scientist's or something like that. And there have been fellows who have been exceptionally able to have insights into my problems and see things that I was overlooking."

Fourth, intellectual, cultural and service activities were regarded with open acceptance and approval by more of the eating club members than of the fraternity group.[21] More of the students we interviewed who belonged to clubs gave time to university service, tutoring underprivileged children, visiting mental hospitals, and so on, than did men in the other groups. Because of their interest in getting good grades for admission to graduate schools, the club men often were unable to satisfy their former interests in reading and cultural matters but our interviewees indicated resentment of lack of time for these activities. As indicated by the table below, interest in intellectual, cultural and service activities was not as popular with students in most of the groups as were social and athletic matters. This is understandable in light of the taxing academic demands of the colleges and the competitive business of getting good grades. In their free time, many of the students felt the need for relaxation and respite from exercising control in the interest of achievement and development.

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Table No. 16

Activities Engaged in Frequently (1)

(Per cent of students who answered "Frequently")

	Eating Club (N=37)	Frat/On (N=69)	Frat/Off (N=44)	Off Campus (N=44)	Dorm (N=42)
Service activities	16%	07%	07%	00%	07%
Student committees	19%	19%	16%	15%	05%
Lectures	30%	19%	16%	23%	15%
Attend museums, symphonies, etc.	16%	06%	07%	13%	19%

Disadvantages of Eating Clubs

The disadvantages of eating clubs as described by the interview sample were as follows: First, the housing arrangements of the eating clubs were not as attractive as those of the fraternity men and may have contributed to lack of cohesiveness in the group.

Second, the position in the university community of the eating clubs was perceived by many of the members as having lower status than the fraternities. A graduate student who had been a club man commented:

> "The fraternity men attract the women, have wailing parties and a cool image. This is what many of the eating club men see and they look at the club with a sense of shame. They are not proud of its fine scholastic record and high-caliber members.
>
> "The difference between a fraternity and an eating club is that the former has superficiality and with the latter you get a sense of indifference...indifference to people around them, indifference to what is going around. With the eating club men sometimes you wish they would worry a little more - they're well-adjusted; they adjust easily; 'If I can't go there, it's not going to be that big a thing, I'll go here.' They don't get upset that easily. Joining an eating club was an adjustment for many of them - they weren't fraternity; they weren't tops on campus. They're pretty well-satisfied with their grades. Some of them get into good schools, others don't. It's not that crucial a thing for most of them. Also, financially they are not so well off and are willing to settle for a less expensive graduate school."

Another characteristic of the eating clubs appeared to be the absence of a desire for a group image. We recalled that although the fraternity men came from a variety of backgrounds, many of them took pride in being perceived by others as fraternity men. This pride in membership was not true of many of the club men.

Fourth, although the eating clubs had a history of many years on campus, they lacked the traditional sense of continuity that characterized many of the fraternities. A student describing his club, commented:

> "Roots run shallow in E1 - and its past lies unrecorded and uncalled upon to summon up aspirations for future members. Personal interest, academic responsibilities and privatistic attitudes keep E1 from assuming a cohesiveness and significance with which members can

identify. El -- lives from day to day, not building on a past or building for a future."

Fifth, the conflict between individual independence and group needs seemed to result in an indifference which showed itself in lack of participation in group activities and lack of responsibility for club affairs. Students had joined the clubs for a variety of reasons. Sometimes students were interested in intellectual and service matters and were unwilling to spend time in social and athletic activities, and vice-versa. Not infrequently, students were unwilling to take time away from academic work or private interests to assist with the administrative or organizational aspects of club life.

This indifference directs attention to the interesting question of "in-group solidarity." Some of the criticisms of fraternities have dealt with the "scape-goating" of outsiders and with the pressures on fraternity members to conform and participate in fraternity-sponsored affairs. Loyalty to a group appears to involve renunciation of some individual preferences. It would be interesting to try to ascertain the point at which an excess of individuality or too much diversity leads to deterioration of a group.

The Unaffiliated

The next two major student groups to be described have defined themselves by their choice of living arrangements as not being interested in or acceptable as part of a defined social group. The two groups of men differed dramatically in terms of conventionality and independence. Many of the dorm men were quite conventional in their values and dependent within a limited circle of relationships. The men who lived in off-campus apartments were often resistant to attempts to limit their freedom to live as they wished and most of them were in protest against the restrictions of conventionality and were open to a variety of new experiences. Another group preferred off-campus living because of its economy and the desire to avoid living with more than one or a few individuals.

THE OFF-CAMPUS MEN

In previous sections, a description of the living arrangements and some of the characteristics of the group preceded the discussion of the students. Obviously, in this instance, there is no clearly defined single milieu. Except in a few unusual circumstances, three or four men moved into one of the many apartment houses available in the area and shared the expense and work involved in housekeeping. They cooked, shopped and lived like members of the non-university community - coming and going as they wished, eating and drinking what and when they preferred and spending the amount of money they desired.

Diversity Among Off-Campus Men

Of the nine off-campus men in our interview sample, two physicists-to-be resembled the dorm men in their task-orientedness and desire for minimal relations. They had been reasonably content with dormitory living but moved to off-campus apartments for reasons of economy, to join two or three friends who made similar decisions or because of annoyance with dormitory efforts to involve them in social life. "They are trying to turn the dorm into a fraternity," one of them complained.

Three other men gave an impression of "rootlessness." These were men who appeared to be excited and restless and had difficulty finding a comfortable place for themselves in the university environment. Their fathers has been well-educated and successful but the families never seemed to have taken root where they lived and the father worked. Also, in two instances the mothers had died during the early adolescence of the sons and this probably contributed to the impression of being unsettled that seemed to characterize these students. The "Uprooted" all were rushed and had opportunities to join fraternities and one of them did join. Son of an international diplomat, he said he would not have considered an "ordinary fraternity" but required one that had "proof of suitable measures of social independence and academic excellence." After three months, he moved out of the fraternity house, maintaining that he liked the house and the men, but "didn't like to get up at 9:00 on Saturday and rake the lawn, fix meals, etc." He maintained a tangential relationship to the fraternity as did a second student. They enjoyed occasional parties at the fraternities but felt that beyond that they did not wish to participate in cooperative efforts or group living. The second student, as a blond Scandinavian, had felt "out of it" in the Italian neighborhood of his high school days. He deeply resented having individuals classified by others according to where they lived. He had exhausted himself as a freshman trying to remove the "dorm stigma" by arranging for a successful dorm-wide social event.[22] He has two unique interests which influenced him to choose an old house to rent. In the garage, he and his roommate ran an auto-repair service which supplemented their finances and they rented their house to on-campus groups for beer parties. This enabled the student to enjoy the gratification he received from arranging for men and women to come together and be congenial - a need he had that had an almost compulsive quality to it.

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[22] This referred to the reputation the dorm men had for being socially inept - especially in their behavior with women.

The third "uprooted" student became a heavy drinker. His choice of housing reflected his attitude toward school, which was, "All I have to do with school is going to classes and eating lunch there. Other than that I live completely out of it." He and his circle of friends were described by a friend as: "individuals, they're all bright; they're all different; somebody from the group is drinking every night..." A description of this group and their girl friends as freshmen by a fellow student was as follows:

> "The group achieved almost legendary status for its incredible parties, feats of drinking, sexual promiscuity and numerous irresponsible acts. The goal was to seek thrills and experience new sensations. However, as is the case of most thrill-seekers, the desire for thrills became an insatiable hunger. They owned motorcycles and took trips on the slightest provocations. As the group slipped more and more into a life without meaning, it became defensively exclusive, barring from its ranks people who wouldn't or couldn't condone it. At the same time the group desperately sought appreciation and acceptance. Their increasing social defaults and increasing rejections began a period of misery from which they couldn't extricate themselves."

Although the off-campus men were among the heavy drinkers on campus, there was a rather large group which abstained from drinking hard liquor.[23] It is our guess that this may have represented the off-

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[23] Table No. 17

Student Drinking Patterns

	Off Campus (N=44)	Frat/On (N=69)	Frat/Off (N=44)	Eating Club (N=37)	Dorm (N=42)
Beer "frequently"*	68%	64%	68%	32%	26%
Wine "frequently"	27%	11%	14%	06%	05%
Hard liquor "frequently"	39%	28%	36%	16%	10%
Beer "never"	07%	04%	02%	11%	26%
Wine "never"	11%	10%	00%	05%	29%
Hard liquor "never"	16%	06%	05%	03%	40%

* Frequently was defined as daily or once or twice weekly.

campus men who resembled the dorm men and had moved into apartments for purposes of greater economy and privacy.

The remaining four students in our sample were energetic and eager. Family income was low and their parents had not had college educations. The men, by virtue of their abilities and energies, were pioneering into a new and exciting world. As freshmen, they appeared self-confident and pleased with the impression they felt that they were making in their new environment. But egocentricism and naivete lead them to evaluate their situation in more optimistic terms than was justified. Although most of them would have liked to join organized groups, they were not accepted. They moved to off-campus apartments in harmony with their dislike of regulations and relectance to be identified with the dormitory students.

> "I didn't enjoy life in the dorms that much. It was a little noisy and I hate regulations of any sort whatsoever - there are certain rules such as no women, no liquor, and so forth. The noise - record players at all hours, screaming and howling, all sorts of animalistic tendencies. It was expensive and I hate institutional food. I can't see standing in line and having stuff dumped on me. So I decided that possibly my place was not in the dorm."

Their inexperience in social affairs, egocentric verbalizations and non-conformity may have prevented them as freshmen from achieving the sort of social life they desired. By the end of their four years they had gained an awareness of how their comments may have jarred others in a group situation. They had benefitted from being at overseas campuses, from a few close relationships and had learned to show recognition of the needs of others to express their ideas and interests. If rushing occurred in the senior year, these men might have been able to join a larger group, add some "color" to it and benefit from further knowledge of social skills.

Characteristics of the Men

Except for the "physicists," the impression that the off-campus men who were interviewed made on most of the interviewers was that they appeared to be critical, verbally skilled, energetic, troubled, impulsive, and interested in intellectual matters. They seemed to relate to family and friends in ways that were intense and often involved conflict and sometimes alienation. Only one of the students was from California and he was different from most students on campus because of his deep-seated missionary interests. His interest in Christian ethics was not that of a constricted and judgmental person but of a strongly impulsive person who felt that he could understand pulls toward indulgent or immoral behavior in others and could help them and himself through the principles of his church. In one way or another, the off-campus men in our interview sample stood out as being "different" from most of the students on campus.

Intellectual Interests and Feelings of Alienation

Accompanying their feelings of "difference" was a sense of being more intellectual and creative than most of the other students. As indicated earlier, they showed less interest in social and athletic activities than did men in the affiliated groups. One of their favorite recreational activities was attending movies, which they did more often than men in the other groups. Attendance at movies provided a relatively inexpensive form of recreation and one that did not necessitate much planning ahead or group involvement. Also, this interest could have reflected their concern with emotional problems. The eating club men shared their interest in movies and attending lectures. However, the club men appeared to have been interested in service to others and in political activities and this was not shared by the off-campus men.[24] Their greatest involvement possibly was in critically evaluating the world as they saw it in the interest of clarifying their own goals and values. They were often deeply concerned with the meaning of life and their own identities. Some of them were actively rebelling against their home backgrounds and attempting to find new answers whereas others came from critical professional and intellectual families and were following a family pattern of criticism and dissent. Many of the students yearned for something, but found it

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[24] Table No. 18

Activities Engaged in Frequently (2)

(Percent of students who answered "Frequently")

	Off Campus (N=44)	Eating Club (N=37)	Dorm (N=42)	Frat/Off (N=44)	Frat/On (N=69)
Movies	41%	32%	20%	25%	19%
Creative expression	23%	16%	17%	14%	10%
Campus politics	08%	14%	07%	07%	12%
Service activities	0%	16%	07%	07%	07%
National and international politics	0%	14%	05%	0%	01%

difficult to define what it was that they actually wanted. One troubled student commented:

> "There are so many different people I've met in different societies and different things I've seen and each one hurts me in some way. I've got to read a lot and find out for myself. Because everything I see, I see something wrong with it.- I can laugh at everything, but with kind of a sadistic laugh, not a humorous one - this is what I'm trying to do in my reading and my writing - trying to piece it all together - because them I don't feel so unreal, so lost."

The student was representative of off-campus men who came from intellectual and cosmopolitan families but who were thrown early in life upon their own emotional resources. Others of the men had more protective emotional backgrounds but lacked intellectual stimulation. As these students were very well-endowed with regard to intelligence, they were attracted and stimulated by many of the ideas and opportunities available to them. Their problem lay in choosing among the variety of interests they had and in integrating their new experiences into their personalities and life goals. Integrating forces such as identification with an intellectual friend or relative, or clear-cut professional aspirations helped some of the students from feeling overwhelmed or diffused.

Questionnaire answers indicated that a high percentage of the off-campus men shared with the fraternity men an interest in traveling.[25] Of our nine men, three traveled as part of the overseas program and three as a result of personal restlessness and discontent with their present environment. Four of the men interrupted their college careers because of adventurousness or suspension and traveled during this period. Traveling may have symbolized their restless attempts to define themselves or to find a place for themselves where they could feel that they belonged. While at the university they often moved from place to place or among different groups, critically appraising each situation as

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[25]

Table No. 19

Students Who Traveled Frequently During College Years

Off Campus (N=44)	Eating Club (N=37)	Dorm (N=42)	Frat/Off (N=44)	Frat/On (N=69)
45%	30%	12%	45%	43%

falling short of their expectations. One student, for example, unsuccessful in joining an eating club, became part of a group of students, mostly from the East Coast, who joined an off-campus cooperative where the tone was existentialist, and critical of Stanford and the West. "Way-out" ideas were seriously considered and evaluated. Dissatisfied, the student left this group and joined a Catholic eating cooperative although he was not Catholic. Attending an overseas campus and service in an underprivileged community were further parts of his efforts to clarify his values and place in society.

The off-campus men's feelings of alientation may have resulted from the turbulence of their separation process from their families, from the rebuffs they received in the university community, or from feelings of superiority because of their perception of their intellectual and creative capacities. In any event, these students were more inclined to feel that the college years were not particularly happy ones, to complain of frequent feelings of depression and to express a wish that they had gone to other universities.[26]

Choice of Occupation, Independence and Unconventionality

The spirit of independence and a sense of confidence in their cognitive skills may have influenced the choice of occupation on the part of the off-campus men. Many of them were interested in

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[26] Table No. 20

Feelings of Happiness and Depression During College Years *

	Frat/Off (N=44)	Frat/On (N=69)	Eating Club (N=37)	Off Campus (N=44)	Dorm (N=42)
Ages 17-21 ranked 1 through 3 in happiness (out of 9)	52%	45%	36%	26%	38%
Feelings of depression daily or few times a week	18%	12%	16%	25%	17%

* About 70% of the students answered the following write-in question: "If it were 1961 again, what would you do differently?" Some commented that they would have gone to another university:

Frat/Off	Frat/On	Eating Club	Off Campus	Dorm
5%	5%	8%	16%	5%

entering the professions of medicine, law, or engineering, which often allow for independent action. This may have resulted from identification with professional parents as 28% of the off-campus students had professional parents in contrast with 15% to 19% of the students in the other residence groups. On the other hand, many of the off-campus men had fathers who had not had college educations and for these students the professions seemed to promise an opportunity for upward mobility. The small number of off-campus as well as dorm men interested in business may reflect a disinclination for the type of adaptation to large groups of people which often is required for success in the business world.[27]

There are many reasons why individuals have a feeling or desire for independence. These reasons include such discrepant factors as distrust of others, confidence in one's own capacities, identification with independent persons and fearfulness of accepting their own or others' dependency needs and attendant obligations. The individual case histories of the students include all of these and others. Another possible factor is ordinal position. In our interview sample all but one of the nine men were oldest children. Assuming that dormitory living provided the most dependent and institutionalized form of living and that off-campus housing was the least institutionalized and provided the greatest independence, it was interesting to note that the proportion of oldest sons in our interview sample increased as the students chose housing in harmony with the above assumption. The clearest suggestion rising from Table 21 is that being oldest may coincide with desiring independence in living arrangements. Perhaps having sisters and no brothers may be associated with an unwillingness to live with a large group of men. This table suggests that the tendency toward gregariousness also might be linked with ordinal position. There were more only children among the least gregarious group in our interview sample, the dorm men, than in the other groups. Men with "brothers only" were more apt to join fraternities, while the off-campus men, unwilling to live with large groups of men, were least likely to have brothers. As our interview sample was relatively small, our table is far from giving conclusive evidence and should be considered as offering suggestions regarding motivations for choosing housing-affiliation groups and as a basis for further exploration.[28]

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[27] See Table 2, page 299.

The men in the fraternities who lived in off-campus apartments shared with the off-campus men an interest in seeking out "off-beat people and places." Although only a small proportion of men noted this as a "frequent" activity, fewer of the off-campus men "never" engaged in this sort of activity than was true of men in other housing groups.[29] The two groups who lived in off-campus apartments

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[28] Table No. 21

Ordinal Position of 42 Interviewees

	Dorm (N=7)	Frat (N=19)	Club (N=9)	Off Campus (N=7)
Oldest in family	28%	45%	67%	86%
Sisters only	14%	25%	33%	57%
Brothers only	14%	45%	33%	14%
Siblings of both sexes	28%	20%	28%	14%
Only child	42%	10%	12%	14%

[29] Table No. 22

Students Seeking Off-Beat Persons and Places

	Off Campus (N=44)	Frat/Off (N=44)	Frat/On (N=69)	Eating Club (N=37)	Dorm (N=42)
Frequently	7%	9%	4%	5%	2%
Never	39%	48%	55%	46%	74%

appeared to be the least religious. They were less inclined to participate in church-connected activities and the off-campus men, in particular, were least likely to pray.[30]

While the fraternity men, who respected authority figures, felt that they had changed as a result of ideas presented in courses or by teachers, the off-campus men were less inclined to acknowledge their influence.[31] This was in harmony with their argumentative and rebellious attitude toward figures of authority. Members of this group were very critical about the Stanford administration. One student commented:

> "The rights of students are to satisfy his intellectual curiosity without interference from the administration, whose sole activities I've indicated should be housekeeping and getting funds and so forth. Conflicts between departments should be handled by the Academic Council. I think students are treated like employees in a company with no rights. They can be thrown out for some action that has absolutely nothing to do with the academic environment. Students have the right to indicate what type of courses should be offered. Another thing, the whole idea of a major is a ridiculous thing. From my point of view there were a lot of courses I wanted to take but I couldn't as a result of the requirements for my major. With most

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[30] Table 23

Students Participating in Church-Connected Activities

	Off Campus	Frat/Off	Frat/On	Eating Club	Dorm
Frequently	9%	9%	20%	16%	21%
Never	68%	68%	64%	59%	60%

Table No. 24

Frequency of Prayer

	Off Campus	Frat/Off	Frat/On	Eating Club	Dorm
Frequently	5%	3%	17%	14%	15%
Occasionally or rarely	36%	57%	45%	56%	40%
Never	59%	41%	33%	42%	33%
No answer	---	---	5%	---	2%

[31] See Table No. 14, page 336.

> people going into graduate school nowadays, I think the ends of students could be better served if he could pick out his own course as an undergraduate according to his own interests - a major is important only in terms of an occupation and if you plan to go on to graduate school, the raison d'etre of a major disappears."

(Regarding a controversial issue involving the administration.)

> "I was delighted with the present problem. The students now psychologically have the advantage over the administration. The administration is defensive. They are just looking for a way out right now. Now they have been found out to have a scandal among their own administrators - this has undermined the prestige or image of the administrators. Now they cannot say, 'We are the administration and we run the school and the rest of you are peons.'
>
> "I am against overnight regulations - you can't regulate morality. My attitude is if the administration approves something, why not oppose it? I feel that the administration uses students' groups as cats' paws - so it looks as if students have enforced something when really it is the Dean of Men and Women who are actually at the back of it."

Predictably, this student prior to college had evidenced a spirit of independence and a desire to challenge authority and institute what he perceived as necessary changes and reforms.

Relationships with Parents

A clue to this attitude toward authority might be found in the relationship of some of the off-campus men with their parents, especially with their fathers. The fathers of the "physicists" resembled those of the "dorm men" with their emphasis on hard work and a tendency toward minimal communication between family members.

The "uprooted" felt that their fathers were distant from them and had given them a freedom that hinted on indifference.

> "My father is a walking encyclopedia. He will condemn me in his eyes if he feels that I have done something wrong but he won't stop me. I think he puts a certain amount of trust in me, which in some cases I've justified and in others I've not. I was very intolerant of mother's worrying and nagging. I resemble my father in that we

> both want to do things. He does a lot of traveling and whatever strikes his fancy, he will do. I didn't go to my parents with my problems. They set up definite guidelines and potential answers to guidelines. So I don't think there was much need to go to them...whatever interests me is OK with them. They don't care. They figure it's up to me."

The hard-drinking student commented:

> "My father has always said - do what the strength of your convictions tells you to do, your intuition. He's brilliant, intellectual, fond of the finer things in life. He knows many people from different areas and classes. I haven't seen much of him - I was at prep school or traveling and when I'm home, he commutes."

A third student, who like the one just quoted had lost his mother during pre-adolescence, commented:

> "My dad was a yeller and a screamer and still is. I don't have much trouble with him. I know how to handle him pretty well. He is very intelligent and if you get him reasoning, he won't yell and scream. But once he blows, it's all over."

Other comments about fathers by the off-campus interviewees seem to indicate considerable ambivalence. In some instances, the fathers had experienced failure and the boys were placed in the threatening positions of feeling destined to surpass fathers whose lives had been a disappointment to themselves and their wives. Sometimes the boys were openly critical of their fathers, while at other times they were strongly defensive of them.

The eager upwardly mobile students in the third sub-grouping of off-campus men commented about their families as follows:

> "My father is dependent, childish. He tries to be fair and a good person but he never puts all the facts at his command together like I do. He doesn't worry until a crisis occurs." (The father had been unsuccessful at work and the mother had had to take over the financial support of the family.) "They should never have married or had children, especially me. They fight, have a good physical relationship but my mother always complains that father couldn't satisfy her in other ways.

> "I'm like my father in that I'm stubborn. My father has had a lot of influence on me - the idea that I should work hard and be successful. I get my literary ability from him; he would have been a top-notch writer or teacher if he hadn't married before he finished college. He loves his family very much, but he has a bad temper. He pays his bills first and then enjoys spending money on racing and gambling. I am like my mother. We are both easily hurt.
>
> "As a freshman I didn't go home very much. My father was glad because as soon as I got home arguments started. My father is stubborn, jumps to conclusions, makes decisions on the spur of the moment. My mother is suspicious and efficient. I rarely spend much time with my family as they just like to sit around."
>
> (And the same student as a senior.) "Although my mother contributed a great deal to what I am in the educational sphere, she tended to overprotect me. This frustrated me and I over-reacted to it in an inordinately large degree. I flaunted my independence which is ironed out now but was a problem. If my parents said something I'd go out and do the exact opposite."
>
> (Regarding his laboring class parents) "My parents don't read at all so I can't talk to them. Their interests are in things I don't care for. My younger brothers aren't intellectual. There are almost no intellectual adults in my small town. My father is brusque. He demands obedience and he is stubborn. Recently he joined a church and has become more mellow. Now he asks me if I will do something instead of telling me to do it and I feel more like doing things for him. In the past my mother used to intervene when my father was harsh."

These four students were intense, ambitious and had intellectual aspirations. For a variety of reasons they had been dissatisfied with their former environments and self-confident that they could design a better life for themselves. At the university, their critical attitude, ambition and restlessness continued.

THE DORM MEN

The freedom with which the off-campus men were able to evaluate others was shared by only two of the nine dormitory men in our interview sample. These two indicated that they were very critical of fathers whom they felt to be strong-willed and stubborn. and with whom they felt that communication and cooperation were impossible. However, even these two students were not as free to criticize others as were the off-campus men. Although they had hostile and aggressive feelings, their psychic structure was such that the avenues of expressing these feelings were more blocked. They threw their tremendous talents and energy into creative work in the sciences. They were convinced of their genius and the day did not have sufficient hours for them to devote to their work. They also were challenged by abstract or theoretical ideas in fields such as philosophy and political science. People, however, seemed to make them anxious and they tended to be isolated.

These two students differed from the majority of the dormitory students, although socially their behavior had many similarities. They differed in that they were more global and adventurous in their thinking and occasionally behaved in a rather impulsive way with manifestations of hostility or creativity. The other dorm men in our sample tended to be quite conservative, hard-working, reliable and over-controlled. All nine tended to be shy, distrustful of others and work-oriented. They tended to keep to themselves and to limit their social, athletic and recreational activities. They were interested in completing each academic assignment in an irreproachable manner and obtaining the highest possible grades. Only the two scientists were inclined toward rebellious and non-conforming behavior but they were usually too busy with their work and theoretical preoccupations to get involved in other matters.

Values and Interests of the Dorm Men

Descriptions of the men who lived in other housing groups have involved references to the behavior and opinions of the dorm men. A summary of some of the findings are as follows: First, there was little change between the freshman and senior years in the overall percentage of students who were satisfied or dissatisfied with themselves. The fraternity men had been very self-satisfied as freshmen and were less so as seniors; the opposite was true of the club men. Of all groups in our sample, the dormitory men seemed to have remained most constant in regard to this aspect of self-evaluation.[32] Second, the dormitory group contained the largest percent of men who drank lightly or were abstainers.[33] Third, in their occupational interests, very few of the dormitory men, like the off-campus men, were interested in business, but unlike the off-campus men, a large percentage was interested in fields which might involve college teaching or research. The dorm men shared with the off-campus fraternity men and the off-campus men an interest in the professions.[34] Fourth, like the relatively intellectual men in the eating clubs, the dorm men were quite low in their interest in future family and love and affection and high in their interest in intellectual and artistic matters. One way that they differed in values from the eating club men was that their post-graduate values did not include a great interest in helping others.[35]

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[32] See Table No. 11, page 317.

The dormitory men indicated that they had not changed much. They described themselves as changing less than men in other groups regarding intellectual interests, freedom to express feelings and kinds of friends.[36] In regard to reasons for change, they indicated that problems in their families and problems in others had little to do with any changes that may have taken place.[37] The same is true for involvement in matters that dealt with social and political improvements. What had influenced them more than other groups of students were ideas from books read on their own and discovering a new capacity in themselves.[38]

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[33] See Tables Nos. 4 and 17, pages 301 and 344.

[34] See Table No. 2, page 299.

[35] See Table No. 12, page 334.

[36] See Tables Nos. 14 and 13, pages 336 and 335.

[37] Table No. 14 listed some of the reasons for changes that were most significant in the lives of the clubmen. Seven of the seventeen choices offered the students are shown in Table No. 25, page 357.

A reason for change given by a relatively large number of the dorm men was involvement with student organizations. This is worthy of further comment. Some of shy, small-town, constricted young men who had been in our interview sample had lived in the same dormitory, often in the same house within the dormitory for four years. By their senior year, some of them had been asked to take offices and responsibilities in the house where they lived, and they had been deeply pleased by this opportunity and attempted to rise to it. Their elected jobs involved working with other people toward common goals in a relatively narrow area, but for these constricted young men it offered an opportunity to venture out of their own personal lives in a way that was not frightening or overwhelming. This may suggest to the educator a way to help these shy and reserved young men.

We have observed that the dorm men tended to avoid off-beat places and people and participate less frequently than other men in most recreational activities. They were significantly less inclined to be involved "frequently" in activities of a social and athletic nature. The activities which involved them more frequently than others were social events connected with churches and attendance at symphonies, museums and dramatic events.[39] Although a segment of

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[38] Table No. 25

Student Self-Evaluation of Causes of Change (2)
(Percent who rated the following as having
"Great Influence" during their first 3½ years of college)

	Dorm (N=42)	Frat/On (N=69)	Frat/Off (N=44)	Clubmen (N=37)	Off-Campus (N=45)
Living Group	21%	61%	50%	27%	7%
Ideas read in books on own	36%	12%	14%	24%	23%
Work experiences	21%	25%	23%	19%	23%
Lack of academic success	10%	12%	16%	10%	9%
Close relations with teachers and adults	12%	10%	14%	16%	14%
Discovery of a capacity I didn't know I had	17%	6%	14%	8%	11%
Participation in student organizations, committees, etc.	24%	8%	12%	11%	2%

[39] See Table No. 16, page 340.

the dorm men may have been involved with religious commitment and church-sponsored social events, there also appeared to be a large group in the dorms who were indifferent or anti-religious.[40]

Characteristics of the Dorm Men

Responses from the larger questionnaire sample have indicated that the dormitories tended to attract as four-year residents students who were most isolated and constricted. The men in our interview sample tended to come from families where the parents had been relatively unsociable and older than was typical for the other groups. The larger questionnaire sample supported the impression the nine interviewees gave of being serious, hard-working men who wanted a limited amount of personal interaction with other people. For some, this reflected feelings of personal inadequacy and fear of criticism or of experiencing closeness. Our interviewees seemed to think of themselves as workers rather than as changing, developing and interacting persons. They tended to treat the university as a vocational experience. They were often conservative in their behavior and views and preferred to live within a narrow and limited life space. The comments of a steady girl friend of one of these students was true of most of the men in this group:

> "He generally keeps to himself and talks little except with his family, or unless the subject is engineering or physics. He spends much of his free time on engineering or sleeping. He enjoys picnicing, camping, mountains, beach. He is a conscientious worker outside of school and finishes what he starts. He doesn't participate in normal 'fun' activities, but is well-liked and respected by co-workers. He is content with himself as he is - pleased that he is competent where others aren't. Sometimes I wish he would appear to enjoy life more by some show of excitement or enthusiasm over something I could understand, but I think he would rather enjoy life in his own way and who is to say which way is better except him?"

This student, along with several others in our interview sample, treated Stanford as a place of training and consciously determined to avoid social or emotional involvements while here. Two men who were drifting towards marriage had chosen high school friends who, prior to college, were "like members of the family." The dorm men seemed to prefer the familiar and predictable in social relations or to be relatively isolated.

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[40] See Tables Nos. 23 and 24, page 351.

Family Backgrounds

The dorm men's keeping to themselves was combined with a cheerful, distant type of friendliness for the majority. The remark "talks little except with his family" was characteristic of many of these students coming from hard-working, self-sufficient family units. Comments like "the folks and I went everywhere together" were common descriptions of their high school days. In some instances the sons were following their fathers' vocational interests and in others were attempting to achieve professional status with the encouragement of fathers who had had no opportunity for formal education beyond high school.

The fathers, as described by the boys, had been quiet, hard-working, thrifty, conscientious, often stubborn men with whom it was difficult to converse or argue. The mothers frequently were involved in church work, were careful housekeepers, frugal, quiet, hard-working, perfectionistic and more out-going than the fathers. The families had been isolated geographically or had limited their social contacts to a few relatives or old friends. The families had moved about very little and with a few exceptions had been characterized by stability. The students were often described by friends as very stable and this stability was often accompanied by passivity and avoidance of change. They had depended on other family members for services and physical presence. If their home situation had satisfied them, they were content to retain such emotional attachments. They chose as friends one or two men who were hard-working and disinterested in personal involvement. If the home situation had been unsatisfactory, the student hoped to depend as much as possible on his own or impersonal sources for gratification of his needs. In either case, most of these students lived in the dorms for four years and were content as long as their physical needs were cared for with minimal demands on them for either time or money.

Although most of the dorm men we interviewed were courteous hard workers who tended to deny their hostile feelings or to control all feelings to the point where intimacy was sacrificed, a few were more passionate men who seemed fearful about the aggression of others and their own anger. In their descriptions of their homes they often portrayed a father who was quiet and amiable until crossed and then stubborn and irritable. As he usually was a devoted family man, the son and mother often combined to avoid situations which would disturb the father's equanimity. However, the mothers seemed unable to protect the boys from their fears of the father, their own anger and the father's wrath. I use the word "seem" because some of the students who were particularly isolated and wary of others responded to our questions about their families with reticence or contradictions. Interviews with these boys sometimes elicited inappropriate comments regarding hostility or expressions of fear about their own inability to control their rage.

Values and Self-concept as Workers

These students frequently had committed themselves to a vocation and way of life prior to college. They tended to view college as a place where they would learn technical information rather than as a community where personality would develop and new values might be considered. Of the nine students in this group, two were engineers, two were pre-medical students and the others were in a variety of fields. All these students placed themselves in situations that required long hours of hard work. Excellent grades in demanding courses were necessary for the maintenance of scholarships or for entrance into graduate schools. The young men viewed themselves mainly as workers and had recognition of their worth from their academic departments and from employers. An interviewer commented about one of these students:

> "Although his whole orientation is to work and productivity, he does seem to obtain real satisfaction out of it. The trouble is he seems unable to have fun in any other way. He is indeed machine-oriented and may be something like a machine himself."

Most of these students had moral, political and religious values that emphasized individual initiative. For the most part, they wanted institutions that either "let the individual alone" or supported such characteristics as hard work, thrift and virtue. They weren't rebellious, inclined to break rules or go in for heavy drinking. Regarding religion, they either were traditionalists or confirmed agnostics following a period of soul-searching while in high school. Politically, they, like most Stanford men at the time of our study, tended to adopt a passive attitude toward political issues while at college, but their preference was a conservative approach to economics and politics.

Tendency to Value Time, Money and Orderliness.

The dorm men in our interview sample were concerned in one way or another with the value of money, the value of time and the importance of orderliness. Although most of them were content to anticipate modest but hard-earned incomes, two were conspicuously eager for great wealth. Either because of shyness, low family income, or because of family patterns of thrift, the dormitory men spent little money on dates, parties, or trips to San Francisco. Cultural activities which they could attend alone or with another boy seemed to them a more justifiable expenditure of time and money. They considered drinking a waste of both.

Most of them were prompt and reliable about time. As one student commented about a friend he liked:

> "I don't know about his negative traits. I always try to think in positive terms. Well, a lot of times he's late. This has always been one of my pet peeves. It was part of my bringing up. My parents think there is something radically wrong if you can't be on time. We live 100 miles from nowhere and yet we get places on time - early - we allow for flat tires and things like that."

And time enters into a later comment by the same student in talking about wishing his friendships had been closer. "I would like all of my friends to be closer. Perhaps lack of time to discuss things prevented this." Another student commented at the end of four years that he regretted that he didn't have time for lectures, time for participation in the university community, time for getting to know the faculty. Regarding the latter, he added that he didn't have any questions to ask them and didn't like to take up their time for nothing.

With one exception, they were fastidious in their appearance, their rooms were orderly and they expressed resentment of slovenliness in others. Regarding a freshman roommate, a student commented:

> "I mean you put two people together arbitrarily, we have our little differences. We have common interests, but coming from two completely different backgrounds, we once in a while have our little clashes in personalities. We have no real outbursts, but I come from a home where everything is always neat and so naturally I keep my side of the room neat and my roommate tends to scatter papers all over the room and his bed is usually unmade, shoes on the floor and that kind of irritates me a little bit, but I try to overlook it. Mother is very neat and orderly and likes things run on schedule and so do I."
>
> (Three years later the student commented:)..."I had this roommate all year although we didn't get along very well. I gained a lot from this. We kept up a surface friendliness. I think it was very important that I learned to tolerate this and control my emotions and not break out and shout at him. I tried not to care about it. Many times his friends would come in at one or two o'clock and I would be in bed, but I never let anyone in the dorm know that I was angry. I let off steam writing home."

The one exception, a scientist, was conspicuously disorderly. He was described by a friend as follows: "He keeps his room in an unbelievable state, an absolute shambles, with bed never made, sheets seldom changed, desk stacked high with books and closet crammed with junk."

Problems in Social Relationships

Many of the dorm men had limited social lives as indicated by the students we interviewed and the answers the men gave on the Senior Questionnaire. They usually had only a few men friends and were reserved in their relationships with them. The reluctance to share feelings of discomfort expressed by the student last quoted was typical of other dorm men. Some appeared equally reluctant or unable to share other feelings.

They either dated infrequently or moved from their parental homes to early marriages with girls from their home towns whom they had known prior to college. In regard to most activities that involved social life or recreation, the dorm men were more isolated than the other men studied. The "genius-isolates" dealt with their lack of involvement with others by openly acknowledging to the interviewers anxiety in this area and indicating that creative efforts in their chosen field provided a gratifying sublimation for their feelings of inadequacy as social beings. One of these students found himself less interested in social contact and personal involvement at the end of his undergraduate years than he had felt as a freshman. A brilliant young man, with a long history of being a "loner," he had been thrown on his own resources at an early age and had been humiliated by a penurious and rejecting father. His academic success made him feel free to avoid human contact and to relinquish humanitarian attitudes which characterized him earlier in his academic career:

> "When I entered Stanford, I didn't really mind meeting people, doing and seeing things, but I now do. For one thing, I don't have as much in common with others as I did when I first entered because I'm not interested in anything that isn't in my field. I'm an introvert most of the time. I've always been terribly shy - the trouble is that I don't want to work on it. I'm sure I would have moved more at another college. When you have a lot of inhibitions and lots of inertia, I just don't want to get over that barrier, I won't even place myself in a situation where I can work on it. I used to laugh at almost everything anytime, anywhere, but now, if it's not intellectual enough, I just give a surface laugh. I get a kick out of things that are subtly humorous - that have

> some ingenuity behind them. I like solving problems. I like looking into problems and delving into them and when my intellect is resting or isn't constantly searching, then I'm bored and dissatisfied."

When asked if he felt that his feeling of alienation was undesirable, he responded: "No, I'm not really sorry it happened. I feel that it is a bit of a loss, but it is something I don't want to correct. I wish it hadn't happened - I suppose I could have taken some positive steps somewhere along the line."

Almost all of the students in this group had friendships characterized by lack of personal involvement. A student discussing his roommate and closest friend during college was an extreme example of this quality:

> "I don't really know Joe very well - we just go fishing together." (What do you talk about in your room?) "Fishing." (Not about yourselves?) "Hardly at all. We don't talk about backgrounds. Just incidentally. I kid him about being a country boy and he kids me about coming from the city. We don't talk much about our work. We don't understand each other's fields." (One is in engineering, the other in a physical science.) "I don't think if either of us had a personal problem we would go to the other one. When we fish together we talk about how we would rather fish than get back to the books or we talk about different types of bait or fishing trips.- I don't like anyone who's bossy and wants his own way. He's been my roommate for three years and we get along fine. He does what he wants to do and I do what I want to do - I get along with most people although I don't like to be around a lot of people. I don't have a lot of real close friends, but I don't have any enemies either."

An attitude of acceptance of a problem in interpersonal relations as one that they were unable or uninterested in coping with was characteristic of some of the students and may have been one of several reflections of a generally passive attitude. Many of the students were content to adapt to dormitory conditions they found unsatisfactory or to academic demands that oppressed them or other displeasing situations rather than actively attempt to make more satisfactory modifications. In some instances their family backgrounds provided atmospheres which had overwhelmed them. The initiative and independent spirit of the students may have been stifled at an early age. In other instances, their behavior was in harmony with identifications with parents or relatives who behaved in a passive or constricted way.

Another dorm man was attempting to cope with his inertia in social matters and described the process as follows:

> "I had to work at it more than other people, that is to force myself to be with others. Left to myself, I wanted to be more by myself. But I forced myself to participate in debate, in intra-mural sports. It was much easier for me to sit by myself. It takes a little bit more effort to meet people. It is much easier to be introverted. Then there is no danger from the world - no danger of being criticized. We would all like to be star football players, but we can't, not all of us. What I really like to do is to have a lemonade, a good book, soft hi-fi music."

He indicated dissatisfaction with his relationships and a determination to work on this even though demands on his time were many. His academic abilities were rather mediocre for the university and his professional aspirations. He described his mother as being lively and flexible and she served as a contrast and stimulus to him in avoiding the rigidities, reticence and social awkwardness of his father. Because of his idiosyncracies he must have met rebuffs as he cheerfully attempted to mix with others, but eventually he developed some skill if not greater empathy for others. This grew with his self-confidence and was a product of hard work and determination. His comments reveal attitudes about a much earlier struggle. As a child he was physically inept and had a speech defect, but was determined to overcome these handicaps. Although far from a warm, empathic and spontaneous person, he was moving in that direction. Admission to professional school was the signal that he could "relax" a little, and he commented that he wished that this had been possible earlier. As a senior he admitted the luxury of occasionally coming to class a few minutes late - an indulgence which as a freshman he would have thought of as a "heresy."

Although the dorm men liked the company of women, most of them were shy and hesitant about asking for dates. When questioned during the senior year, 26% of the dorm men reported that they averaged no dates each week during the senior year in contrast with 16% of the off-campus men and 1% to 5% of the men in the fraternities and eating clubs. From our interview sample we gained the impression that the dorm men were in need of guidance and education in social interactions and in gaining respect for themselves as persons. The stress that they seemed able to face was that of occasional feelings of loneliness or boredom. The stress that they were more reluctant to bring into awareness was that connected with their feelings of inadequacy as people and difficulties in coping with anger or sexuality in themselves or others. A difficulty that they shared with the fraternity men involved limited skills in communication and avoidance of introspection. These were either cause or effect of an avoidance of complexity in issues and relationships.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, let us review some of the educational and developmental tasks of college students. What briefly are some of the university expectations of the student besides the many compartmentalized and loosely integrated tasks that are demanded in his courses? Possibly, the university hopes to produce an individual who thinks in a certain way. This individual might be expected to look at himself, society and history in a way that is based on knowledge and welded together by a balanced and integrated attitude. Conceivably, he should have a receptivity for a broad variety of ideas and yet be capable at any time of taking a stand and committing himself to action. Ideally, this commitment would be harmonious with the sum total of his integrated knowledge at a specific time and not a sort of cemented commitment that resembles rigidity. It is obvious that such a university goal cannot be achieved during the few hours a week that a student is in the classroom, and that the extra-curricular experiences of the student are relevant to both his developmental goals and educational ones.

Our study did not start out with a special interest in residential arrangements, but the importance of this aspect of college life to the students forced itself upon us. As a result of the information we have gathered, we would like to make several observations.

Diversity and Flexibility

First, the relationship between the social environment of the students and intellectual receptivity and emotional well-being was frequently noted by students and interviewers over the four years. In the interviews, most of the students indicated that much of their mental and psychic energies were involved in developing a sense of their own separateness and uniqueness and in modifying their behavior so that they could relate to others in a gratifying and meaningful way. The residence groups to which they belonged played an important part in defining the patterns of adaptation.

Second, although generalizations about subgroups may not be true of all individuals within each group, there is a discernible difference between groups in regard to certain values, interests and behavior. Unless a university's admission policy is such that a small homogeneous group is admitted, there probably will be considerable variation among students in their social development and in their perception of their social needs. With this in mind, we recommend diversity in housing arrangements and flexibility through the college years in movement from one group to another.

Third, our experience suggests that ascertaining the characteristics of subgroups within a college is a worthwhile research project for the university to undertake. Research into the experiences of individuals should precede suggestions for change. What might be helpful for individuals in one group might be unnecessary, irrelevant, or even harmful for another group. Such research into the nature of subgroups should be undertaken at appropriate intervals as the college social scene seems to be one which is in a state of rapid change. On the basis of our investigation we would like to offer some suggestions as illustrations of the value of this sort of research.

Suggestions About Student Subgroups

The club men believed that they had experienced beneficial changes and an increased sense of self-esteem. With their relatively greater interest in service to others and in social and political improvement, they possibly could further contribute to the university community and their own education by administering a service center comparable to the Phillips Brooks House at Harvard. Such a suggestion is made with full awareness of the excellent work already done at Stanford by a number of service-oriented organizations. However, apparently there is still room for a greater variety of students to participate more fully in such activities if opportunities were made available. This sort of activity might enhance the self-esteem of the club men and their status among their fellow students. Improvement of their physical plant would also be a benefit to them.

The fraternity men could be encouraged to follow in the footsteps of adult fraternal groups and offer more services to others. For example, their aid could be enlisted to provide publicity and financial assistance for a service center and to participate in a variety of service activities. Out of this sort of experience, they might get more empathy and understanding of individuals different than themselves. Many fraternity men have athletic knowledge and skills which could be transmitted to young people from less priviledged backgrounds. Learning about tennis, golf, dancing and other skills might enable them to have more gratifying social lives. The fraternity men might be quite comfortable instructing others in areas in which they have skills and experience. Some of the fraternity men had summer jobs in the recreational field, and had experience in encouraging others to enjoy leisure time activities.

Modification in the intellectual level of the fraternities could possibly be achieved in an evolutionary fashion by a revision of the rushing procedure which would give the seniors more weight than given to other fraternity men in the process of selecting pledges. Test scores show that fraternity seniors tested higher on scales such as "social maturity" and lower in "authoritarianism" than was true of fraternity men as entering freshmen. (Their rate of change was about the same as that of other men in our total sample.) As such changes seem to indicate a greater capacity to view social and psychological factors in a more complex and open-minded manner, the seniors might evaluate potential pledges in a way that would bring into the fraternities students who might be less inclined toward élitism and masculine bravado. Our interview experience has shown that the fraternity men we interviewed soon after they joined the fraternity and during their sophomore year were more prone to drink heavily, disparage academic involvements and display disregard for community approval than was true of the same students as seniors. It is likely that a proportion of the more impulsive men did not survive long enough to be tested as seniors but as sophomores they would have played an important part in recruiting new members.

A service that a group like the inter-fraternity council might offer could be to provide a place and professional services for group discussions, modeled after group psychotherapy. Such groups might have more attraction for fraternity members than more individualized guidance services and might have preventive as well as curative functions. In addition to helping individual students with personal problems, such groups might add to general information about in-group tensions. Such information could provide for modification of fraternity life and also have implications for other groups dependent upon in-group solidarity for achievement of common goals.

Given the characteristics of the dorm men in our interview sample, it seems probable that one way to increase their social capacities lies in increasing their social experiences. Greater encouragement of campus and off-campus organizations which serve the needs of the students would be helpful. (We described the function of church groups in this regard.) They could be helped by participation in dormitory committees. We reported that some dorm men, especially in their last year or two as undergraduates, discovered that they had an interest and ability to work with other men on committees within their houses in the dormitories. Another way to assist the dorm men lies in enlisting the cooperation of the student employment services. If these students could be placed in positions which involve working with others, they might develop more ease in social contacts. Dealing with unfamiliar people in work situations had been welcome opportunities for some of our interviewees. If students who were as reserved and shy as some of our dorm men described themselves were given jobs such as waiters or desk clerks in libraries, it might be more helpful to them than jobs where they do not need to get involved with other people.

The off-campus men could benefit from the type of plan which attempts to integrate into the housing units more of the intellectual and cultural aspects of the university community. There also are members of other groups, especially the "genius-isolates" of the dormitories who would enjoy a social milieu that stressed sharing of abstract ideas rather than camaraderie or mutual dependence and empathy. The off-campus men have often complained about lack of intellectuality and could possibly relate more easily to others on this sort of a basis. Establishment of small housing units around special interests (designated as "drama houses," "creative writing houses," "political problem houses," etc.) which would have faculty members as residents might have special interest for these students. For as long a period of participation as was useful for them, residence in these houses might provide these students with a sense of belonging to the university which might help them overcome their feelings of dissatisfaction or alienation.

Such special interest houses suggest a possibility for freshman houses. Many of our students as freshmen felt that the university was very demanding academically but not sufficiently rewarding intellectually. They often had come from "accelerated" classes in the high schools and were enthusiastic about intellectual ideas. Their feeling of intellectual "let-down" might be alleviated if the students were able to choose houses within the freshman dorms on the basis of their special interests, skills or curiosities. At a time when all is unfamiliar, it might be helpful to find new friends with shared meaningful interests. Also it would hasten their acceptance of the university as an intellectual and cultural community and might affect the nature of housing groups that would be formed later. When freshmen who have had such an introduction to the university community later join fraternities they might bring to the fraternity subculture a more open acceptance of aesthetic and intellectual interests.

Many other modifications suggest themselves, but these few suggestions have been offered in support of our contention that knowledge of the college careers of men in various groups could lead to recommendations specifically harmonious with the needs and values of individuals within the subgroups.

Overseas Campuses

Regardless of their place of residence, almost all of the men benefited in their social development from participation in overseas campuses. Here, regardless of interests, they were placed in a relatively homogeneous group in an unfamiliar environment which necessitated being helpful to each other. Because of the novelty of being abroad for a limited period, enjoyment of new experiences and pleasure was approved and expected. This was particularly valuable for the dorm men. Competitiveness was less than at the home campus because of the nature of the curriculum, the special selection of students and the even number of men and women. The students tended to explore the surrounding areas in groups rather than as couples and the emphasis on coquetry and sexual competitiveness was replaced by a more leisurely opportunity to get to know members of the opposite sex as individuals and friends. Under these circumstances, in our interview sample, we saw dorm men delighted with themselves for having been able to enjoy feminine companionship and group fun. We saw fraternity men expressing interest in artistic and cultural matters without feeling that this was inappropriate masculine behavior and we saw off-campus men learning, through inescapable group involvement, that they could modify some of their behavior in the interest of getting along with others.

Conclusion

In conclusion, we would recommend that attempts to modify the milieus be the products of joint efforts on the part of students and administration. The administration, besides having professional skills, provides a continuity of experiences which is lacking in the constantly changing population of four-year students. On the other hand, the students may be more responsive to the urgency of their developmental tasks and the effect of the many rapid changes that are occurring at the universities on their personal and social lives. They usually are better informed than anybody else about what goes on in their residences. Research into the nature of student populations should be repeated at appropriate intervals in order to ascertain changing conditions and avoid self-perpetuating but inappropriate regulations.

Looking back critically, none of the existing housing arrangements for the men seem ideal for meeting either the developmental needs of the students or the goals of the university. Possibly the universities tend to overemphasize intellectual capacities and tasks. However, as man is a unitary creature, if his physical and social needs are disregarded or minimized, all suffers. It is likely that such neglect will interfere with the intellectual process itself. Often it appears that housing arrangements, the circumstances under which the students spend a great proportion of their time, have been more or less left to chance, to matters of economic efficiency, and to artistic design, but have not been thought through in terms of the developmental and intellectual needs of the students.

The developmental tasks of the individual are many, difficult, and destined to require years beyond college for fulfillment. Some of the tasks which occupied students we interviewed included the search for autonomy, evaluating oneself as a separate individual and achieving a loosening of symbiotic attachment to the parental home.

Other tasks involved the capacity to formulate and move toward the sort of life one can create out of the multitude of opportunities in the environment and the great variety of potentialities within oneself.

For his security and growth, the student needs to find ways to meet both his needs for autonomy and his social needs. The latter requires the capacity to give and to receive, to laugh and have fun, to be refreshed and recreated by the stimulus of other personalities and patterns of motivation, and to move toward adult assumption of responsibility and commitment in interpersonal relations. To achieve these social ends, the student has to develop skills and patterns of adaptation that may not have been demanded of him as a younger person in his family and own home community. The residential groups have been described in the service of providing a setting for better understanding of the process by which individual students moved towards these goals.

LIST OF TABLES

	Table No.	Page
Verbal and Mathematical Scholastic Aptitude Test Scores	1	298
Post-graduate Status of Senior Men One Year After Graduation	2	299
Number of Times Students Described Themselves as Being Drunk During Past Year	3	300
Activities: Percentage of Subjects in Each Type of Living Group Who Participated Frequently	4	301
Activities Engaged in by Fraternity Men (1)	5	303
Fraternity Men Attributing Change to Problems	6	303
Relationships with Women	7	304
Activities Engaged in by Fraternity Men (2)	8	305
Fraternity Men's Self-Evaluation of Areas of Change	9	305
Self-Satisfaction as Freshmen and as Seniors	10	306
Psychological Test Scores as Freshmen and as Seniors	11	317
Activities and Interests Considered Important After Graduation	12	334
Student Self-Evaluation of Changes in Intellectual Interests, Values and Personal Characteristics	13	335
Student Self-Evaluation of Causes of Change During College (1)	14	336
Students Who Frequently Participated in Social and Athletic Events	15	337
Activities Engaged in Frequently (1)	16	340

List of Tables, continued

	Table No.	Page
Student Drinking Patterns	17	344
Activities Engaged in Frequently (2)	18	346
Percentage of Students Who Traveled Frequently During College Years	19	347
Happiness and Depression During College Years	20	348
Ordinal Positions of Interviewees	21	350
Students Seeking Off-Beat Persons and Places	22	350
Students Participating in Church-Connected Activities	23	351
Frequency of Prayer	24	351
Student Self-Evaluation of Causes of Change (2)	25	357

Chapter VIII

CAREERS: CHOICE, CHANCE, AND INERTIA

Harold A. Korn, Ph.D.

It is part of the American dream and a main theme in the rhetoric of higher education that each individual will be encouraged to develop his unique potentialities. The underlying assumption is that he will then choose an intrinsically satisfying and maximally rewarding career plan. Most college students are given a year or two to find both themselves and a vocational plan for their lives. But too often, during this amazingly short period when they are offered explicit encouragement to explore, their daily tasks are at odds with the goal.

The hour-to-hour work of the student is involved with courses with highly specialized goals, in preparation for an often unknown and psychologically distant future. Even the broad range of introductory and general studies courses are most often taught by men trained to be specialists, who reward students accordingly. Students, in turn, are willing to engage in specialized discourse. Much of the structure of higher education encourages them to master complexity of academic subject matter and put aside questions of personal relevance.

That today's college students are confronted with a system which has not even openly acknolwedged these contradictions will be a central theme of this chapter. We will look first at the academic plans and career aspirations of an entire college class from freshman year through the first year after graduation, focusing upon presentation of facts and certain relationships between these facts. We will then discuss some of the forces operating in society which confront the student with contradictory and often unfair alternatives.

By studying the progress of an entire class with respect to plans and actual achievement, we can bring into focus the play of these social forces on the lives of individuals. In present day society, the career an individual settles into not only determines the "40" hours of the week devoted to work but has a powerful shaping force on the remaining 128 hours. Adolescents are keenly aware of this. They see a career choice as that invisible life-line connecting them to the adult world. It can be a gentle pull toward full development, a strangling conception of what the adult world demands, or a broken line of communication that leaves the young person with a sense of isolation and desperation.

Methods of Data Collection

In 1961, members of the entering freshman class at Stanford were administered a variety of psychological tests. Among these was the Strong Vocational Interest Blank, results of which are analyzed in this chapter. In addition, the entering freshmen were asked to complete an information blank prepared by the National Merit Scholarship Corporation. This questionnaire asked that they indicate their anticipated career choice and probable college major. Instructions were as follows:

> Be as specific as you can; e.g., list mechanical engineering (not engineering), teaching high school (rather than teaching), etc. If you are not sure what field you wish to enter, you may write undecided.

For all students entering in 1961 and graduating in June, 1965, (not all had graduated) we tried to obtain follow-up information in the spring of 1966. All students in the class of '65 were mailed a questionnaire concerning their current status. In addition to these data collected at the beginning and end of their undergraduate years, we also have complete data on their grade point averages and aptitudes.

While we are dealing with a single large group--the entering class of 1961 (Men, 860; Women, 425)--there will be many instances in which the subgroups we select for detailed study will differ in size. This occurs because we collected data at different times over the five-year period, and at various times some subjects were not available for testing, did not respond to a questionnaire, or data were missing for some unknown reason. Each table contains the size of the group that is being described.

Results

We will begin by (1) providing an overview of the stated career expectations of the freshmen. Then we will (2) briefly describe what many of these men are doing approximately nine months after graduation. After presenting this overview we shall (3) select three groups of men who as freshmen expressed an interest in either medicine, law, or engineering. We will then (4) examine some of the characteristics of the men who actually go on to graduate or professional school and the characteristics of those who change their plans. We have selected these three professional groups for illustrative purposes. Our intent is to raise questions about how well the educational system is working, both from the point of view of the needs of society and the fulfillment of the needs of individuals. When individuals change their career plans, do they do so on the basis of a rational consideration of the alternatives? Or are chance or irrational factors influencing vital decisions? Alternate questions can be raised about students who stay with a decision reached in early life and never subject it to critical examination. After completing this analysis for the men, we will repeat much of it for the women.

In Table 1 we have the number of men who stated their probable future occupations. In addition to the total number who expressed an occupational choice, there is a further breakdown by expected probable major. From this cross-tabulation it is clear that freshmen see many different academic paths to the same eventual career. Conversely, students in any given major are likely to be headed for many different careers.

Probable Occupations

The data in Table 1 will be viewed differently by different readers. Those who feel, for example, that society is not encouraging enough young people to become artists will find it alarming that not a single male in our sample considered this a probable future career. Those who feel we must continally replenish and expand the pool of lawyers will be encouraged to see that nearly 13 per cent of the entering freshmen planned to go to law school.

Table 1

PROBABLE FUTURE OCCUPATION BY PROBABLE MAJOR FIELD OF STUDY
(Men)

	Frequency
Architect	8
Architecture	7
No response	1
Business	26
Business Administration	2
Economics	2
Engineer	3
Int. Relations	1
Language	1
Political Science	1
Psychology	2
Natural Science, other	2
Social Science, other	4
Business (cont.)	
Mixed majors	3
Undecided	2
No response	2
Business Executive	18
Business Administration	5
Economics	3
Language	1
Political Science	1
Mixed majors	1
Undecided	1
No response	6

Table 1 (cont.)

	Frequency
Chemist	8
Biochemistry	1
Biology	1
Chemistry	5
No response	1
College Prof. or Teacher	16
Chemistry	1
English	1
History	1
Mathematics	3
Physics	1
Political Science	1
Sociology	1
Humanities	2
Mixed majors	2
No response	3
Dentist	6
Biology	1
Pre-dentistry	2
Natural Science	1
Undecided	2
Engineer	68
Engineering	47
Mathematics	1
Physics	1
Natural Science	3
Mixed majors	2
No response	14
Engineer - Business, Sales Executive	9
Engineering	9
Foreign Service	23
History	1
International Relations	9
Language	1
Mathematics	1
Political Science	6
Social Science	4
No response	1

	Frequency
Journalist	6
Engineer	1
Journalism	3
Political Science	1
No response	1
Lawyer	81
Economics	5
Engineering	5
English	4
History	5
International Relations	2
Philosophy	4
Political Science	16
Pre-law	11
Social Science	4
Humanities	2
Mixed majors	5
Undecided	5
No response	13
Mathematics	19
Engineering	1
Mathematics	16
No response	2
Military Service	8
Biology	1
Engineering	3
English	1
Natural Science	2
Political Science	1
Physician	93
Biology	8
Chemistry	6
Economics	1
Language	1
Natural Science	7
Philosophy	2
Physics	2
Pre-med	43
Psychology	4
Mixed majors	1
Undecided	1
No response	17

Table 1 (cont.)

	Frequency
Physicist	30
Mathematics	1
Natural Science	2
Physics	25
No response	2
Teacher	25
Education	2
Engineering	1
English	1
History	2
Humanities	3
Language	2
Mathematics	5
Natural Science	1
Physics	2
Social Science	1
No response	5
Other (including double choices)	72
Anthropology	2
Biochemistry	1
Chemistry	1
Economics	5
Engineering	5
English	2
History	3
International Relations	5
Language	3
Mathematics	3
Physics	4
Political Science	4
Psychology	1
Undecided	111
Chemistry	1
Economics	2
Engineering	6
International Relations	2
Mathematics	5
Natural Science	3
Physics	2
Political Science	7
Pre-law	2
Social Science	4
Speech	1
Mixed majors	7
Undecided	53
No response	10
No Response	120
Business Administration	1
Chemistry	3
Economics	2
Engineering	16
English	6
Humanities	4
International Relations	1
Mathematics	8
Natural Science	4
Physics	5
Political Science	5
Pre-med	6
Psychology	1
Social Science	5
Sociology	1
Mixed majors	5
Undecided	16
No response	31

NOTE: The following occupations were not chosen by any students in the sample: accountant; advertising; anthropologist; artist; clergyman; clerk (business).

The following occupations were chosen by 5 or less students in the sample: actor; biological scientist; business - sales; college professor - scientist; farmer; government service; interpreter; missionary; pharmacist; psychologist.

In the light of all the pressure that exists in our society to encourage an individual to make a decision, it is interesting to note that 13 per cent of the freshman men explicitly stated they were undecided. In addition, another 13 per cent did not answer this question. This category of "No response" is ambiguous, but one would expect that a large percentage of this 13 percent were also undecided. This percentage swells considerably when one considers the large proportion of students who shift from one career commitment to another during the undergraduate years.

Post-Graduate Status

Where are these men after graduation? Table 2 presents the data organized according to the undergraduate college from which the student graduated and lists seven different alternative activities the student might be engaged in after graduation. Although the percentages vary slightly for the several undergraduate colleges, on the average about 65 per cent of the sample were in graduate school at the time of filling out the questionnaire.

Table 2

SCHOOL LAST REGISTERED IN AS AN UNDERGRADUATE AND PRESENT ACTIVITY
(Men)

	Frequency	%	
School of Earth Science			
Graduate School	7	58.3	
Military Service	1	8.3	
Job	2	16.7	
Other--unclassified	2	16.7	N = 12
School of Education			
Graduate School	8	100.0	N = 8
School of Engineering			
Graduate School	37	63.8	
Military Service	4	6.9	
Job	9	15.5	
Other--unclassified	8	13.8	N = 58
School of Humanities and Sciences			
Graduate School	281	66.9	
Military Service	38	9.1	
Job	51	12.1	
Other--unclassified	34	8.0	
Seeking Employment	1	0.2	

Table 2 (cont.)

	Frequency	%	
School of Humanities and Sciences (cont.)			
Peace Corps	11	2.6	
Other Volunteer Work	4	0.9	N = 420
School of Law			
Graduate School	2	100.0	N = 2
Did Not Indicate School			
Graduate School	8	33.3	
Military Service	2	8.3	
Job	5	20.8	
Other--unclassified	9	37.5	N = 24
		TOTAL	N = 524

A more detailed view of the various fields these graduate students are pursuing is presented in Table 3. We have listed the graduate program the student is engaged in. Taking the absolute number of students stating a career preference as a criterion, the largest groups are as follows: Law School (59), Medicine (43), School of Business (39), and Engineering (37).

Table 3

SCHOOL LAST REGISTERED IN AS AN UNDERGRADUATE AND PRESENT GRADUATE FIELD OF STUDY
(Men)

	Frequency	%	
School of Earth Science			
Geology	2	28.5	
Geophysics	2	28.5	
Medicine: [illegible]	1	14.3	
Petroleum Engineering	2	28.5	N = 7
School of Education			
School of Education	8	100.0	N = 8
School of Engineering			
Engineering (unspecified)	8	21.62	
Aero & Astronautics	2	5.41	
Chemical	2	5.41	
Civil	3	8.11	
Electrical	13	35.14	
Industrial	2	5.41	

Table 3 (cont.)

	Frequency	%	
School of Engineering (cont.)			
Mechanical	1	2.70	
Nuclear	1	2.70	
School of Business	8	21.6	
School of Law	2	5.41	N = 42
School of Humanities and Sciences			
Accounting	1	0.36	
Advertising	1	0.36	
Anthropology	1	0.36	
Architecture	3	1.07	
Art	1	0.36	
Biological Sciences	6	2.14	
Biophysics	1	0.36	
Chemistry	7	2.49	
Communications	1	0.36	
Dentistry	2	0.72	
Divinity School	5	1.78	
Economics	4	1.42	
English	13	4.63	
General Studies Education	5	1.78	
Hispanic American Studies	1	0.36	
History	22	7.83	
History of Science	1	0.36	
Journalism	1	0.36	
Mathematics	5	1.78	
Math & Computer Science	2	0.72	
Mechanical Studies	4	1.42	
Modern European Languages	4	1.42	
Music	1	0.36	
Pharmacology	1	0.36	
Philosophy	5	1.78	
Physics	7	2.49	
Physiology	2	0.72	
Political Science	6	2.14	
Psychology	13	4.63	
School of Business	39	13.00	
School of Education	6	2.14	
School of Law	59	21.00	
School of Medicine	43	15.30	
Sociology	2	0.72	
Speech and Drama	2	0.72	
Teaching	1	0.36	N = 276

Table 3 (cont.)

	Frequency	%	
Did Not Indicate School			
Government Work	1	12.50	
Psychology	1	12.50	
School of Business	1	12.50	
School of Law	3	37.50	
School of Medicine	2	25.00	N = 8

The graduate school chosen by the student is listed in Table 4. Variability in the number of students entering different graduate departments at Stanford University reflects differences in policy among the various departments: some will accept their own undergraduates; others will not.

Table 4

SCHOOL LAST REGISTERED IN AS AN UNDERGRADUATE AND NAME OF GRADUATE SCHOOL
(Men)

	Frequency	%	
School of Earth Science			
Stanford	3	42.86	
University of California	1	14.29	
Northwestern	1	14.29	
Others	2	28.57	N = 7
School of Education			
Stanford	8	100.00	N = 8
School of Engineering			
Stanford	18	48.65	
University of California	4	10.81	
Cal Tech	1	2.70	
Columbia	2	5.41	
Harvard	1	2.70	
MIT	4	10.81	
Northwestern	1	2.70	
Others	5	13.51	N = 36
School of Humanities and Science			
Stanford	40	14.23	
University of California, Berkeley	16	5.69	
University of California, Other	28	9.96	
Cal Tech	1	0.36	

Table 4 (cont.)

	Frequency	%	
School of Humanities and Science (cont.)			
Columbia	13	4.63	
Cornell	3	1.07	
Harvard	17	6.05	
MIT	4	1.42	
Northwestern	4	1.42	
Princeton	3	1.07	
University of Chicago	8	2.85	
University of Michigan	3	1.07	
University of Washington	8	2.85	
University of Wisconsin	6	2.14	
Yale	8	2.85	
Others	118	41.99	N = 279

Freshman Choice and Post-Graduate Status

We are now in a position to bring together our two sets of data, freshman career expectations and post-graduate status. In Table 5 we have listed the post-graduation status of students who started as freshmen with similar occupational choices. There is a varying relationship between the freshman career preference and the likelihood of a student going on to graduate school. We would expect this because it requires a different kind of commitment to say, "I am going to be a physician," as compared with saying, "I plan to be a lawyer." The future physician is tacitly saying he is willing to go along a well-defined path during his undergraduate years in addition to the rigors of medical school. The freshman who intends to become a lawyer has much more freedom in course selection during his undergraduate years and in the type of occupation the law degree will enable him to enter. There is some evidence in our data (and the data of cognitive dissonance studies) which suggests that decisions requiring more psychological commitment from the very beginning also carry with them the likelihood of greater perseverance.

Table 5

Freshman Occupational Choice and Post-Graduate Status

	Frequency	%
Lawyer		
Graduate School	37	59.00
Military Service	4	6.50
Job	7	11.00
Other work	8	13.00
Peace Crops	3	5.00

Table 5 (cont.)

	Frequency	%
Lawyer (cont.)		
Other Volunteer	1	1.50
Unknown	2	3.50
Engineer		
Graduate School	15	47.00
Military Service	4	12.50
Job	7	21.80
Other Work	4	12.50
Peace Corps	0	0.00
Other Volunteer	1	3.00
Unknown	1	3.00
Physician		
Graduate School	42	79.00
Military Service	1	1.89
Job	3	5.66
Other Work	4	7.55
Peace Corps	1	1.89
Other Volunteer	1	1.89
Unknown	1	1.89
Mathematician		
Graduate School	9	81.82
Military Service	0	0.00
Job	0	0.00
Other Work	0	0.00
Peace Corps	0	0.00
Other Volunteer	0	0.00
Unknown	2	18.00
Physicist		
Graduate School	17	80.95
Military Service	0	0.00
Job	0	0.00
Other Work	0	0.00
Peace Corps	0	0.00
Other Volunteer	1	4.70
Unknown	3	15.00

Table 5 (cont.)

	Frequency	%
Business		
Graduate School	7	58.33
Military Service	2	16.67
Job	3	25.00
Other Work	0	0.00
Peace Corps	0	0.00
Other Volunteer	0	0.00
Unknown	0	0.00
Business Executive		
Graduate School	5	62.50
Military Service	2	25.00
Job	1	12.50
Other Work	0	0.00
Peace Corps	0	0.00
Other Volunteer	0	0.00
Unknown	0	0.00
Undecided		
Graduate School	37	51.39
Military Service	8	11.11
Job	12	16.67
Other Work	0	0.00
Peace Corps	3	4.17
Other Volunteer	0	0.00
Unknown	11	15.00
No Response		
Graduate School	42	62.69
Military Service	3	4.68
Job	6	8.96
Other Work	7	10.45
Peace Corps	2	2.79
Other Volunteer	0	0.00
Unknown	7	10.45

Of those freshman, for example, who expressed an interest in becoming a physician, 79% were in medical school or some graduate program at the time of the follow-up, whereas 59% of those who had expressed an interest in law as freshmen were in law school or some graduate program. About half of those who were undecided or did not indicate a career direction were also in graduate school during the first year after graduation. In keeping with our expectations, these percentages are smaller than for some of the groups with explicit career directions. Nevertheless, it also suggests that freshman indecision cannot be taken as an index for lack of motivation for graduate study.

In order to focus attention on the complexity of the process, it is necessary to point out an exception to the generalization stated above concerning degree of commitment and perseverance. Undergraduate engineers seem to be making a commitment to a definite undergraduate program; yet we find a large percentage of these students engaged in something other than engineering after graduation. Through interviews with these students, we were able to look more deeply into their motives, discovering that many view engineering as a stepping stone to some other career. This suggests the importance of determining a more carefully defined meaning of "commitment" than is indicated by superficial aspects.

We can now return to an examination of the extent to which the freshman's choice of a future occupation is congruent with what he is doing in graduate school. The definitions of congruence must be made clear. We shall, as we go along, offer several different operational meanings. One definition is particularly obvious: a counting of the number of students who are pursuing careers after graduation which seem to have some direct relationship to freshman career choice.

Freshman Career Interest and the Graduate School Program

In Table 6 we have the graduate and professional schools attended by men who had different career expectations as freshmen. Using law as an example, we see from Table 5 that 62 men expressed interest in law as freshmen and returned follow-up questionnaires. Table 5 also indicates that 37 of these men were in graduate school. From Table 6 we see that of those 37 men, 25 were in Law School and the others in a variety of other fields.

Upon the examination of the results for the 32 freshman men indicating a preference for engineering, we note from Table 5 that 15 were in graduate school one year after graduation. Table 6 indicates that of those 15 men, only 3 were in graduate programs in engineering, whereas 9 were enrolled in the Graduate School of Business. Schools of Architecture, Divinity, and Medicine accounted for the other three students.

Table 6

Graduate School Program Chosen by Men with Different Freshman Career Expectations

	Frequency	%
Lawyer		
Advertising	1	2.78
English	2	5.56
General Studies	1	2.78
History	2	5.56
International Studies	1	2.78
Political Science	1	2.78
School of Business	2	5.56
School of Law	25	69.40
School of Medicine	1	2.78
Engineer		
Architecture	1	6.67
Chemical Engineering	1	6.67
Divinity School	1	6.67
Electrical Engineering	1	6.67
Mechanical Engineering	1	6.67
School of Business	9	60.00
School of Medicine	1	6.67
Physician		
Biological Science	2	4.76
Chemistry	2	4.76
Counseling	1	2.38
English	1	2.38
History	2	4.76
Physiology	1	2.38
School of Business	2	4.76
School of Law	3	7.14
School of Medicine	28	66.67
Mathematician		
Accounting	1	11.11
Computer Science	1	11.11
Divinity School	1	11.11
Economics	1	11.11
History	1	11.11
Operations Research	1	11.11
Psychology	1	11.11
School of Business	2	22.22

Table 6 (cont.)

	Frequency	%
Physicist		
Biophysics	1	5.88
Chemistry	1	5.88
Electrical Engineering	1	5.88
Geology	1	5.88
Geophysics	1	5.88
Physics	5	29.41
Psychology	1	5.88
School of Business	2	11.76
School of Education	1	5.88
Business		
History	2	28.57
School of Business	3	42.86
School of Law	2	28.57
Business Executive		
Psychology	1	20.00
School of Business	3	60.00
School of Law	1	20.00
Undecided		
Biological Sciences	2	5.41
Divinity School	1	2.70
Economics	1	2.70
English	2	5.41
Government Work	1	2.70
History	4	10.81
Industrial Relations	1	2.70
Mathematics	2	5.41
Modern European Languages	1	2.70
Music	1	2.70
Psychology	1	2.70
School of Business	5	13.51
School of Education	3	8.11
School of Medicine	2	5.41
Veterinary School	1	2.70

Table 6 (cont.)

	Frequency	%
No Response		
Aeronautics	1	2.38
Anthropology	1	2.38
Architecture	1	2.38
Biological Science	1	2.38
Dentistry	1	2.38
Electrical Engineering	1	2.38
English	4	9.52
General Studies	1	2.38
Hispanic America	1	2.38
History	2	4.76
Industrial Relations	1	2.38
Mathematics	2	4.76
Petroleum Engineering	1	2.38
Pharmacology	1	2.38
Physics	1	2.38
Political Science	2	4.76
Psychology	4	9.52
School of Business	5	11.90
School of Law	7	16.67
School of Medicine	4	9.52

We are interested in evaluating these findings, both from the perspective of the degree of satisfaction the individual will obtain from his choice and from that of optimal utilization of talent in a society which has strong need for well-trained individuals. It is significant that 65% of the class attended graduate school immediately following graduation. From the perspective of the production of men with degrees, the educational system is clearly working. Whether or not it is working to produce the quality of talent needed in our society cannot, of course, be answered by the data thus far presented. Nor have we determined whether or not the system is helping individuals make the best choices for themselves. In order to come, even partially, to grips with these questions, we will have to examine other kinds of data. This will also further our analysis of congruence between freshman choice and eventual decision.

Cumulative Grade Point Average

The first thing we shall consider is how the group of students we have been describing differs with respect to certain standard academic measures. Here we are interested in the student's overall aptitude for traditional academic work and his actual academic performance. In Table 7 are the cumulative grade point averages (GPA) and the Scholastic Aptitude Test (S.A.T.) scores for eight different groups of students.

Most of the differences occurring between these eight groups in terms of their academic performance are accounted for in three categories: School of Business graduate students, engineering graduates who are employed, and humanities and science graduates who are employed. It is the last two groups which account for most of the differences in the verbal scale of the S.A.T.

A cautious generalization would be that men who find positions immediately after graduation from Stanford tend to have lower GPA's and lower verbal aptitude scores. We find, however, upon examination of the mathematical aptitude scores, that these three groups no longer differ so radically from the others. Given this evidence that the employed group possesses high aptitude for quantitative reasoning and relatively low cumulative grade point averages, we can formulate the hypothesis that these men have a certain constellation of aptitudes that are not rewarded as much as others at Stanford. This is not to suggest that the whole undergraduate curriculum be made more quantitative in emphasis for this sub-group of students. It does, however, raise some questions about the use of different styles of teaching and broadening our concept of academic learning. Considering the need in our society for men with skills of quantitative reasoning, it is incumbent upon educators to search for ways to make the entire curriculum meaningful to students with different patterns of aptitudes and skills.

A more traditional view of this evidence might be that these students were simply not motivated to work very hard. Whether the institution has failed these students, or whether the students have failed themselves, or some complex interaction has occurred cannot be answered by our data. Still, the fact remains that by some of the prevailing standards of our society, these students are not fulfilling themselves. Moreover, since some graduate education is becoming the new national standard of achievement, the situation all too often may result in a loss of self-esteem for the student as well as a loss of talent for society.

Concern about the optimal development of the talents of individuals should not be limited to those missing such an obvious sign of success as acceptance to graduate school. For our data raise questions, as well, about those who do go on to graduate school. Many of the facts indicated in Table 7 suggest that students entering widely diverse fields may have remarkably similar patterns of aptitudes and levels of academic

Table 7

Follow-up Questionnaire Status During the 1966-1967 Year

Senior Cumulative Grade Point Average

	N	X	SD	1	2	3	4	5	6	7	8
Graduate School - Engineering	22	3.09	.37							2.87	4.68
Graduate School - History	20	3.07	.42							2.44	4.15
Graduate School - Science	16	2.93	.41								2.66
School of Business	44	2.74	.35		3.74	2.99		3.27	3.10		
School of Law	56	2.98	.41							2.09	4.29
School of Medicine	35	2.96	.29							2.65	4.25
Engineering Graduate w/job	6	2.62	.29								
Humanities/Science Graduate w/job	(48)	2.63	.37								
Verbal S.A.T.											
Graduate School - Engineering	21	632	61							2.24	
Graduate School - History	22	638	63							2.40	1.98
Graduate School - Science	18	642	58							2.67	2.11
School of Business	47	609	63						3.33		
School of Law	63	647	57							3.16	3.60
School of Medicine	41	624	61						1.96	2.04	
Engineering Graduate w/job	6	570	53								
Humanities/Science Graduate w/job	48	605	65								

NOTE: t tests were made between all pairs and those significant at the .05 level are in the matrix of results.

Table 7 (cont.)

Math S.A.T.

	N	X	SD	1	2	3	4	5	6	7	8
Graduate School - Engineering	21	692	58					3.40	2.04*		2.02*
Graduate School - History	22	631	62								
Graduate School - Science	18	721	62					4.63**	3.48**		
School of Business	47	668	68				2.87				
School of Law	63	658	70								2.11*
School of Medicine	41	669	55				3.28	2.52*			
Engineering Graduate w/job	6	668	42								
Humanities/Science Graduate w/job	48	655	76								

performance. (A notable exception are the science students who have an extremely high level of aptitude for quantitative reasoning.)

A superficial view of these data would suggest that men and the careers they pursue are interchangeable. Yet a large literature in the social sciences and a basic assumption of the modern counseling practices suggest that a career choice is a very personal expression of a complex human personality.[1] If work is to be a continuing source of intrinsic satisfaction, it must involve significant segments of the individual's system of needs, wishes and aspirations. In order to deal with this question, we must turn to our next level of analysis and an examination of the variables which tap these complex human motivations. Here congruence between freshman choice and eventual decision will be considered from a more psychologically sophisticated point of view.

The Strong Vocational Interest Blank

A traditional approach to the discussion of the appropriateness of an individual's career choice places great emphasis on his measured interests. One of the most widely used measures in this field is the Strong Vocational Interest Blank. The essential goal of this instrument is to compare the interests of an individual with those of men in general and those employed in different occupations. There are approximately fifty different occupations represented in the Strong inventory, and for purposes of ease of conceptualization, these are often reduced to seven families of occupations. These seven groups are organized on the basis of the intercorrelation between scales and thus represent a distillation or focusing of different kinds of interest.

For each of these seven families of interest, a scale represents the degree of interest. A primary pattern, indicating the greatest degree of interest, represents a majority of A or B+ scores on the occupational scales in a family of occupations. A secondary pattern, the next level of interest, represents a majority of B+ or B scores on the occupational scales in a family of occupations. At the other extreme, if the student shows a less than average amount of interest, he has a "reject" pattern with all scores below C. Scores not in these categories are referred to as "other" patterns.

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[1] A recent book edited by Henry Borow, Man in a World of Work, Boston: Houghton-Mifflin, 1964, contains an integrated review of this literature.

In the Appendix, the pattern-analysis data of the Strong Vocational Interest Blank for all Stanford men are presented and classified according to their freshman statement of future occupational choice. While it is clear that for some students measured interests bear some relationship to stated career goals, it is also clear that many others do not have well developed measured interests, even in areas related to their future career choice. What does this mean? Do people choose careers on some other basis than their measured interests? We can begin to answer these questions by looking at the interest patterns of individuals and their post-graduate status. We will take subsets of these data and examine them in greater detail.

Measured Interest of Men in Law, Medicine and Engineering

We have complete information for 55 men who expressed interest as freshmen in a future law career. Table 8 gives the Strong interest patterns for these men classified by their post-graduate status. The lawyer scale appears in the verbal-linguistic family of occupations, and we would expect students expressing an interest in law as a career to have high scores in this area. Of those entering the School of Law, 13 had either a primary or secondary pattern in the area and 12 had an "other" pattern. Of those entering graduate school, four had either a primary or secondary pattern; three an "other pattern. Of those engaged in secondary activities, eight had primary or secondary patterns and 15 "other" patterns. The same variability in matching measured interests and career choice is reflected in the data for physicians in Table 9 and engineers in Table 10. Using a primary or secondary pattern as an index of appropriateness of interest, we find that approximately half the men in law and medicine had an appropriate constellation of interests.

Table 8

Strong Pattern Analysis for Students Whose Freshman Career Choice Was Law

School of Law (25)	1 (Prim)	2 (Sec)	5 (Other)	9 (Reject)
Biological Science		2/ 8	21/84	2/ 8
Business Detail	4/16	3/12	18/72	
Physical Science			20/80	5/20
Sales	6/24	6/24	13/52	
Social Service	3/12	6/24	14/56	2/ 8
Technical		1/ 4	23/92	1/ 4
Verbal	5/20	8/32	12/48	

Table 8 (cont.)

Other Graduate Schools (7)	1	2	5	9
Biological Science			5/71	2/28
Business Detail	3/43	4/57		
Physical Science			4/57	3/42
Sales	3/43	1/14	3/43	
Social Service	1/14		6/86	
Technical			6/86	
Verbal	2/29	2/29	3/43	
Other Plans (23)				
Biological Science			16/70	7/30
Business Detail	6/26	4/17	13/57	
Physical Science		1/ 4	17/74	5/22
Sales	6/26	7/30	10/43	
Social Service	4/17	4/17	14/61	1/ 4
Technical		2/ 9	20/87	1/ 4
Verbal	3/13	5/22	15/65	

Table 9

Strong Pattern Analysis for Students Whose Freshman Career Choice Was Medicine

Medical School (28)	1	2	5	9
Biological Science	8/28	7/25	13/46	
Business Detail		5/18	20/71	3/11
Physical Science	5/18	2/ 7	20/71	9/ 4
Sales	2/ 7	3/11	23/82	
Social Service	4/14	2/ 7	22/78	
Technical	2/ 7	3/11	23/82	
Verbal	7/25	3/11	18/64	
Other Graduate Schools (14)				
Biological Science	4/29	2/14	8/57	
Business Detail		1/ 7	13/93	
Physical Science	2/14	1/ 7	11/79	
Sales	1/ 7	1/ 7	12/86	
Social Service	1/ 7	2/14	8/57	3/22
Technical	1/ 7	2/14	11/79	
Verbal	1/ 7	4/29	9/64	

Table 9 (cont.)

Other Plans (10)	1	2	5	9
Biological Science	5/50	3/30	2/20	
Business Detail		1/10	8/80	1/10
Physical Science	2/20	2/20	6/60	
Sales			10/100	
Social Service		1/10	7/70	2/20
Technical			10/100	
Verbal	3/30	3/30	4/40	

Table 10

Strong Pattern Analysis for Students Whose Freshman Career Choice Was Engineering

School of Engineering (3)	1	2	5	9
Biological Science	1/33	1/33	1/33	
Business Detail	1		2	
Physical Science			3/100	
Sales			3	
Social Service		2	1	
Technical	2/66		1	
Verbal			3	
Other Graduate Schools (11)				
Biological Science		1/ 8	9/75	1
Business Detail	2	4	5	
Physical Science		1	9	
Sales		3	8	
Social Service	1		9	1
Technical	1	3/25	7/58	
Verbal			1	
Other Plans (16)				
Biological Science	1/ 6	2/13	11/69	2/13
Business Detail	3/19	3/19	10/63	
Physical Science	1/ 6	3/19	12/75	
Sales	1/ 6	4/25	11/69	
Social Service			13/81	3/19
Technical	3/19	3/19	10/63	
Verbal		1/ 6	15/94	

For those individuals who have a particular interest in the Strong Vocational Interest Blank, it will also be of interest to study the specific scales for these three occupational groups. In Table 11, results are given for the respective occupational scales of the three groups. Using the B+ category as a minimum criterion for judging appropriateness of career choice, we can examine what is happening in the three career groups. For men attending the School of Law, only half had the interests shared by other lawyers, whereas 80% of the men in the School of Medicine had interests in common with other physicians. It is of interest to note that men who had a professional career in mind as freshmen and are now attending other graduate schools in pursuit of other paths to a career had a higher proportion of B+ or higher scores than those entering the field represented by the scale.

Table 11

Freshman Career Choice Physicians and Strong Physician Scale

	C-	C	C+	B	B+	A	
In Medical School		3		3	2	20	(28)
Other Graduate Schools			1	2	2	9	(14)
Not in Graduate School		1		1		8	(10)

$x^2 = 8$ N.S.

Freshman Career Choice Engineers and Strong Engineering Scale

	C-	C	C+	B	B+	A	
In Graduate Engineering					2		(2)
Other Graduate Schools	2	1	3	2		4	(12)
Not in Graduate School		1	2	3	3	7	(16)

$x^2 = 17$ N.S.

Freshman Career Choice Lawyers and Strong Lawyer Scale

	C-	C	C+	B	B+	A	
In Law School		2	2	8	6	7	(25)
Other Graduate Schools				4	3	4	(11)
Not in Graduate School	1	4	4	6	1	7	(23)

$x^2 = 12$ N.S.

When we thus examine the results of the Strong in the light of what happens to the career plans of our students, several questions are raised. The first question must concern itself with the permanance or stability of interests during the college years. Traditionally interests were thought to be fairly stable. But we see evidence in our data for a good deal of shifting. Therefore, the Strong results of the freshman may not be an accurate representation of the student's interests as a senior.

Just as there is evidence that interests may not be as stable as we once thought, there is also evidence that occupations are also in a state of transition. The second question must then focus on the appropriateness of the original occupational criterion groups used in the construction of the Strong. The most obvious example is the field of engineering which has been transformed in the last twenty years. But other occupations and professions are undergoing similar revolutions.

Given the issues raised by the first two questions, the next question that must be raised focuses on the use of the Strong in counseling and guidance. To the extent that the counselor sees his job as helping the individual match his interests with a specific career, he must be careful to take into account both the evolving nature of the individuals' interests and the evolving nature of occupations. Rather than taking the static notion of matching as the aim of counseling, it would seem more appropriate to encourage the college student to consider himself as continually developing. Students should be encouraged to assess their interests as entering freshmen, again at the end of their sophomore year, and again when they are seniors. To make such a plan a practical reality, the present structure of college majors would have to be modified. Students could then experiment rather than arbitrarily choose a major, hoping that they have made a good match.

In order to make the data for these three groups comparable to those presented for the composite group presented above, we will present grade point and aptitude data separately for each of the three professional groups. The results appear in Tables 12 and 13. We found earlier that, in general, men going on to graduate or professional school tend to have higher GPA's than those who seek employment immediately after graduation. Findings for individual career groups are similar. Once again, the high level of math aptitude is apparent for all groups: those going to graduate or professional school and those who seek employment.

Thus far, our intent has been to present a detailed description of the career aspirations and the first step of career realization for a group of talented men. We have focused our attention on several groups of men who expressed an interest in

Table 12

Freshman Interests and Post-Graduate Status

Difference in GPA

Medicine	X	SD	1	2	3
In Medical School (22)	2.92	.31		NS	NS
Other Graduate Schools (12)	2.63	.43			NS
Not in Graduate School (8)	2.88	.39			
Engineering					
In Engineering School (3)	3.00	.46		NS	NS
Other Graduate Schools (11)	2.77	.36			NS
Not in Graduate School (12)	2.57	.50			
Law					
In Law School (21)	3.04	.40		NS	3.50
Other Graduate Schools (10)	2.89	.35			2.07
Not in Graduate School (16)	2.57	.39			

Table 13

Freshman Interests and Post-Graduate Status

Difference in Scholastic Aptitude Scores

	Verbal		Math	
Medicine	X	SD	X	SD
In Medical School (25)	611	49	665	43
Other Graduate Schools (14)	608	62	661	61
Not in Graduate School (10)	584	46	662	51

Table 13 (cont.)

	Verbal		Math	
	X	SD	X	SD
Engineering				
In Engineering School (2)	600	108	677	84
Other Graduate Schools (10)	595	60	701	51
Not in Graduate School (14)	584	84	707	49
Law				
In Law School (10)	653	55	652	70
Other Graduate Schools (23)	612	55	634	67
Not in Graduate School (16)	625	69	627	76

Note: t tests were computed for all pairs and none were found significant at the .05 level.

a professional career as freshmen, because this permits us to illustrate several trends representative of the entire class. Most obvious of these trends is the shift in career direction for large numbers of men between the freshman year and the year following graduation (see Table 6). In itself, this is not at all surprising, given the tentativeness of the freshman commitment and the four years of intervening experience.

Trends which are less obvious but of central concern have to do with factors contributing to an individual's decision to stay with an early career commitment or to change. Following an analysis of data for women in this same class, we will turn to a more general discussion of factors influencing the career selection process among the students studied by us.

Probable Occupation and Probable Major of Women Students

Freshman women's responses to questions concerning probable major field of study and probable future occupation are cross-tabulated in Table 1A. The single largest category among future occupations is teaching (other than college teaching), which accounts for 14% of the students. Consideration of the probable major field of these potential teachers reveals a broad range of interests; among these, "language" is the largest single category.

Table 1A

Probable Major Field of Study
Stanford Women 1961

Probable Future Occupation	Anthropology	Architecture	Biochemistry	Biology	Chemistry	Economics	Education	Engineering	English	Fine Arts	History	International Relations
1. Advertising												
2. Anthropologist												
3. Architect		1										
4. Artist										4	1	
5. Biological Scientist				5								
6. Business												
7. Business Executive						1						
8. Chemist			1		6							
9. Clerical												
10. College Prof/Teacher									2		1	1
11. " "/Scientist												
12. Engineer								2				
13. Foreign Service											2	13
14. Geologist												
15. Government Service												
16. Housewife										1		
17. Housewife & Job				1					1			1
18. Interior Decorator												
19. Interpreter												
20. Journalist	1								2			
21. Lab. Technician				2								
22. Lawyer												1
23. Mathematician												
24. Musician												
25. Nursing												
26. Pharmacist					2							
27. Physician				1								
28. Physicist												
29. Psychologist												
30. Social Work												
31. Sociologist												
32. Speech Therapist												
33. Teacher				1			8		8		7	
Other			1	2		2			1	1	1	2
Undecided									4		1	3
No Response							1		3	1	1	
TOTAL	1	1	2	12	8	3	9	2	21	7	14	21

Table 1A (cont.)

	Journalism	Language	Mathe-matics	Music	Nursing	Physics	Philosophy	Pre-Law	Pre-Medicine	Psychology	Sociology	Speech-Drama	Humanities	Natural Sciences	Social Sciences	Mixed Major	Undecided	No Response		Totals
1.										1										1
2.																				0
3.																				1
4.																				5
5.														5						10
6.															1					1
7.																				1
8.														1				1		9
9.		1																		1
10.		2	2				2						1			1	1			13
11.																				0
12.																				2
13.		7													2	1		6		31
14.																				0
15.															1					1
16.		1					1						2			1	3	1		10
17.	1								1				1		1					7
18.																				0
19.		5	1																	6
20.	3												2		1	1		1		11
21.														1				1		4
22.								1										1		3
23.			9																	9
24.				1																1
25.					2												1			3
26.																				2
27.						1			8					1			1	1		13
28.						4												1		5
29.										7								1		8
30.											3				2					5
31.																		1		1
32.												1				1				2
33.		12	6	1						1			5			2	2	4		57
		3	4										2	3		7	1	6		36
		2	2								1		4	1	4	4	38	10		74
		1	3	1		1				2			2	4	2	7	8	16		53
	4	34	27	3	2	6	3	1	9	11	4	1	19	16	14	25	55	51		386

It is noteworthy that approximately 5% of the freshman women indicated "Housewife" as a future occupation. It is apparent that many others planned to marry, but at this point in their lives, they did not define being a housewife as an occupation.

Among all the women, the largest single category for probable future occupation was "Undecided." This accounted for approximately 20% of the women. Another 12% did not respond to the question concerning future occupation.

Post-Graduate Status

Moving five years ahead in the lives of these students, we can examine the outcome of their early statements of choice. Follow-up data for the women are summarized in Table 2A which represents, as for the men, the status of these women approximately nine months after graduation. Some 35% of our sample were attending graduate school in some capacity, although only 28% were full-time graduate students. The two other largest categories are those women who were employed and those who were married, each accounting for approximately a third of the group.

Table 2A

School Last Registered in as an Undergraduate And Present Activity (Women)

	Frequency	%
School of Earth Science		
Graduate School	1	100.0
School of Education		
Graduate School	7	77.8
Housewife	1	11.1
Travel	1	11.1
School of Engineering		
Graduate School	1	50.0
Job	1	50.0
School of Humanities and Science		
Graduate School	73	28.1
Graduate School and Job	19	8.1
Job	89	34.2
Housewife	77	29.6
And Grad. School (24)		
And Job (37)		
And Other (6)		

Table 2A (cont.)

	Frequency	%
School of Humanities and Science (cont.)		
Other Work	9	3.5
Seeking Employment	6	2.3
Travel	1	0.4
Peace Corps	3	1.2
Other Volunteer Work	2	0.87
School of Law		
Graduate School	1	100.0
Did Not Indicate School		
Graduate School	4	36.4
Housewife	3	27.3
Peace Corps	2	18.2
Other Work	2	18.2
	TOTAL	N = 370

Graduate Programs

The various graduate fields these women were pursuing are presented in Table 3A. The largest single group were in a School of Education. While this cannot necessarily be equated with preparation for teaching, it does bear some relationship to the freshman figures regarding an early interest in teaching. Table 4A presents the various graduate schools these women students were attending.

Table 3A

School Last Registered in as an Undergraduate And Present Graduate Field of Study

	Frequency	%
School of Earth Science		
Chemistry	1	100.0
School of Education		
Education	7	100.0
School of Engineering		
Education	1	100.0

Table 3A (cont.)

	Frequency	%
School of Humanities and Science		
Anthropology	1	1.4
Art	1	1.4
Biological Science	2	2.7
Chemistry	1	1.4
Classics	2	2.7
Communications	2	2.7
Economics	1	1.4
English	3	4.1
General Studies	2	2.7
Geology	1	1.4
History	3	4.1
International Studies	2	2.7
Journalism	2	2.7
Library Science	2	2.7
Modern European Languages	3	4.1
Physical Therapy	2	2.7
Political Science	2	2.7
Psychology	2	2.7
Russian	1	1.4
School of Business	2	2.7
School of Eucation	17	23.3
School of Law	2	2.7
School of Medicine	7	9.6
Spanish	2	2.7
Speech and Drama	1	1.4
Other	2	2.7

Table 4A

School Last Registered in as an Undergraduate And Name of Graduate School

	Frequency	%
School of Earth Science		
Other	1	100.0
School of Education		
Stanford	7	100.0
School of Engineering		
Stanford	1	100.0

Table 4A (cont.)

	Frequency	%
School of Humanities and Science		
Stanford	15	20.6
University of California, Berkeley	7	9.6
University of California, Other	3	4.1
Columbia	6	8.2
Cornell	1	1.4
Harvard	3	4.1
University of Chicago	1	1.4
University of Michigan	2	2.7
University of Washington	1	1.4
University of Wisconsin	1	1.4
Yale	3	4.1
Other	26	35.6

Cumulative GPA

When we categorize these Stanford women on the basis of what they were doing nine months after graduation, their respective grade point averages and aptitude scores reveal some interesting patterns. These data are reported in Table 5A. It is clear that the women who were full-time graduate students had the highest undergraduate GPA's. Many of the differences between groups on GPA are small, however, and not statistically significant. The greatest difference is found between full-time graduate students and those who were employed full time.

An examination of differences between these groups on their verbal aptitude scores also reveals results similar to those found with the men. The largest difference occurs between full-time graduate students and those women employed full time. It is of interest to note that women who were both married and attending graduate school had the highest mean aptitude score.

Quantitative aptitude scores revealed no significant difference among groups.

Why do some women go on to graduate school and not others? Both GPA and aptitude differences between the several groups are so slight that very little of the variance is accounted for. It is natural, therefore, to consider interest and motivation as a basis for understanding the differences among these women.

Measured Interest

Responses to the Strong Vocational Interest Blank administered

Table 5A

Follow-Up Questionnaire Status During the 1966-1967 Year
Stanford Women

Senior GPA	X (S.D.)	1	2	3	4	5	6
Graduate School (N=51)	3.14 (.41)		1.94	4.87	N.S.	2.18	N.S.
Graduate School and Job (N=11)	2.88 (.37)			N.S.	N.S.	N.S.	N.S.
Job (N=72)	2.80 (.36)				N.S.	N.S.	N.S.
Housewife (N=5)	2.95 (.14)					N.S.	N.S.
Housewife and Job (N=20)	2.91 (.37)						N.S.
Housewife and Grad. School (N=12)	2.96 (.38)						
Verbal SAT							
Graduate School (N=57)	682 (.56)		N.S.	2.50	N.S.	N.S.	N.S.
Graduate School and Job (N=13)	674 (.46)			N.S.	N.S.	N.S.	N.S.
Job (N=82)	656 (.62)				N.S.	N.S.	2.17
Housewife (N=7)	681 (.31)					N.S.	N.S.
Housewife and Job (N=35)	660 (.61)						N.S.
Housewife and Grad. School (N=19)	690 (.61)						
Math SAT							
Graduate School (N=57)	615 (.75)		N.S.	N.S.	N.S.	N.S.	N.S.
Graduate School and Job (N=13)	633 (.89)			N.S.	N.S.	N.S.	N.S.
Job (N=82)	621 (.73)				N.S.	N.S.	N.S.
Housewife (N=7)	613 (.47)					N.S.	N.S.
Housewife and Job (N=35)	620 (.77)						N.S.
Housewife and Grad. School (N=19)	629 (.95)						

to all these women at the time of their entrance to college were studied in an effort to discover clues to why some women chose to continue their educations while others did not. Since the most disparate groups on other counts were those women who chose to attend graduate school full time in comparison to those who had taken full-time jobs, it seems desirable to examine the scores of these groups on each of the 25 scales of the Strong inventory. Results of the four scales with significant differences are presented in Table 6A. It is important to point out that there is remarkably little difference between groups which appear to be going in such different directions, a finding in keeping with the unimpressive differences in other variables.

Table 6A

Individual Strong Scale Scores for Women Entering Graduate School and Other Occupations

	C	C+	B-	B	B+	A	
Author							
Graduate School	10	10	7	11	9	9	(56)
Job Only	15	9	18	25	6	6	(79)
							N.S.
Femininity							
Graduate School			4		6	46	(56)
Job Only	4	2	7		5	61	(79)
							N.S.
Music Teacher							
Graduate School	30		18		8		(56)
Job Only	61		12		6		(79)
					$x^2 = 6.90$		.05
Occupational Therapist							
Graduate School	11		22		23		(56)
Job Only	57		6		6		(79)
					$x^2 = 39$		.01
Office Worker							
Graduate School	36		7		3		(56)
Job Only	30		33		16		(79)
					$x^2 = 10.96$		.01
Psychologist							
Graduate School	15	9	8	8	9	7	(56
Job Only	33	16	10	6	6	8	(79)
							N.S.
Social Worker							
Graduate School	4	5	12	10	12	11	(56)
Job Only	24	8	17	16	5	9	(79)
					$x^2 = 13.29$		.05

Results of the four scales do suggest some trends. The job-only group had more high scores on the Office Worker scale. Conversely, the graduate school-only group had more high scores on the Social Worker, Music Teacher, and Occupational Therapist scales. Upon first impression, the graduate school women seem to have something which might be called professional social service interests. Nevertheless, in the light of the many "professional" scales for which there was no significant difference, this kind of designation must be offered tentatively.

One of the non-significant differences deserves special attention because of the many stereotypes which are so prevalent: the graduate school women were not significantly different from the employed women on the Masculinity-Femininity scale.

The most striking fact revealed by the data is that slightly less than half as many women are in graduate school as men. Given the high level of ability represented by this group of women, a sure loss of academically-trained talent is evident. If there were evidence that the decision to continue or not continue their education was made on the basis of measured interests, this finding would be less arresting. Yet, even more strikingly than for the men, no strong evidence is revealed of differences between the group of women going to graduate school and those choosing other alternatives.

In order to put these results into context, we will briefly cite certain results reported in greater detail in Chapter I. Our data suggest that students are moving on to important career choices without a careful evaluation of what they most want for themselves. Does this mean that most seniors are actively dissatisfied? On the Senior Questionnaire they were asked: "How sure are you that your present choice of your career or occupation is the most appropriate for you?" Approximately 70% of the men and women said they were very sure or moderately sure. Clearly there was no widespread dispair. Yet when they were asked at the same time, "To what extent has your planning for your life's work involved you in a struggle of conflicting thoughts and feelings?" about 80% of the men and women answered "Very much" or "Moderately."

Is the conflict resolved and are the students as sure of the appropriateness of their choice as they indicate? From the descriptive data presented above, it is impossible to draw any firm conclusions. The data do suggest, however, that large numbers of very talented students do not appear to be choosing careers on the basis of their measured interests. It is not the intent here to put measured interests in the position of an ultimate criterion of the wisdom of an individual's career choice. Instead, the Strong Vocational Interest Blank has been used as a crude mirror to help reflect some aspects of a very complex process.

The complexity of the process requires that we go beyond that which is easily quantifiable if we are to increase our understanding of what is really happening. One kind of analysis that adds clarity is the study of individual cases. In several chapters of this report, case studies are presented which illuminate the process of career choice (Chapters III, IV, VI).

While case studies can reveal the variety and subtlety of the psychological forces that bear on the individual, they cannot clarify the many social forces which also affect him. In the next section we will, therefore, outline some of these social forces and the impact they have on the lives of students.

Discussion

There is a beguiling orderliness to the ease with which college seniors become graduate students, employees, or members of the military services. Every year the sorting takes place and the economy prospers. The whole structure of higher education is designed to look at external signs of success and, more rarely, to focus on the needs of the individual. But only by focusing on the needs of the individual can orderliness become a symptom and the conventional analysis of success a criterion of wastefulness and inefficiency. Some of the forces affecting the career planning of college students are outlined in what follows.

1. Presumed freedom and subtle coercion.

A prevailing opinion in both the home and the school is that the young person should know what direction he has in mind for a future career. An equally strong constellation of opinion exists centering on the importance of a young person's deciding for himself what he wants to do with his life. What tends to happen is that the pressure to decide is so great that the individual begins to feel there is no time for genuine exploration. This all starts very innocently -- when, for example, we jokingly encourage or discourage the child's wish to be a fireman when he grows up. The humor begins to disappear, however, when the adolescent in high school must begin to amass the grade point average that will allow him to enter a prestige college.

We can say very piously to the high school student that we want him to develop his individual talents and eventually to pursue a career that will be maximally fulfilling. At the same time, the secondary school and the student's parents are so committed to helping him achieve college entrance that they focus their primary attention on achievement. While the student is told that he has freedom of choice, it is also made clear that this freedom has to be earned by achievement. This emphasis in our society upon achievement as a vehicle for the attainment of something else is both pervasive and pernicious.

Students are expected to work hard in high school in order to gain admission to college. They are supposed to work hard in college so they can be admitted to graduate or professional school. Finally, working hard in graduate school gains one the opportunity to start out in the "real world," which is much akin to the student's world in its emphasis on achievement-as-a-vehicle. The rewards of the game are different, however, with financial gain replacing cumulative grande point average as a goal.

If the student begins to doubt the value of the system which is determining so much of his behavior, he has to deal with a wide variety of consequences arising from not playing the game. The system of rewards and punishments that are part of the outside world are brought home to the student in his daily life in a variety of ways: failure of the hard-working high school senior to gain acceptance into the college of his choice; ever-increasing escalation of educational requirements for nearly all the most desirable positions; discovery by a father that he has been passed over for a promotion in lieu of someone who has more impressive academic credentials.

It is easy to see the price paid by those students who, for one reason or another, cannot play the game as defined by the system. What is harder to see, but is perhaps of even greater consequence to our society, is the price paid by those who do play the game; dropping into place can be fully as serious as dropping out of school.

The dilemma of the adolescent is the personal sense of urgency he feels about his immediate concerns and the vast array of constraints he feels are put in his way. The adolescent is particularly sensitive to the contradiction we have been describing. He is told that his life is his own; yet his daily behavior is very little his own. Postponement is the password offered; if he can accept this, doors will be opened to him later.

It is in school before college that this contradiction is most clearly visible. For twelve years the student is encouraged to think -- or, at least, do work requiring intelligence -- in order to meet some external set of demands and expectations. Inherent in the emphasis on achievement-as-a-vehicle and postponement-as-a-rationale is an unavoidable danger. The sense of meaningful participation we ask to be postponed will in fact be lost.

The potential freshness of approach and passionate involvement of the adolescent are qualities we search for in many segments of the adult world. That such characteristics are hard to find is evident. It would appear that they are hard to find because many of our educational procedures systematically train individuals to deny them. It is not that this is planned in the program; it is, rather, an inevitable result of the emphasis on achievement-as-a-vehicle.

Adolescents want answers to their questions. As they discover that the formal requirements of school do not provide such answers, they remove themselves psychologically from their studies. The capacity to do this permits adolescents to work hard at school tasks while pursuing their own inquiries in their own fashion. While it is wasteful not to deal with the real questions of youth during the school years, many adolescents still retain a great curiosity and involvement in many other sectors of their lives. But as they enter college, many of them entertain the great hope of integrating the several parts of their lives.

2. The examined life versus life by examination.

For the adolescent, preparation, postponement and paternal constraints are all worth putting up with because they carry with them the promise of the unknown, but sought-after, college experience. The entering college freshman is remarkable in his willingness to try out new behaviors and ideas. This is not to deny the great impact of his previous 12 years of schooling upon his capacity for independent thinking. Nor does it deny the 18 years of socialization, perceived by parents to be a gift they themselves bestow upon their children. But the aura of a liberal arts college, the heightened influence and emotional impact of peers, and the anxiety associated with the challenge of a new adventure all combine to form the ingredients for growth and change.

While the entering freshman is ready (with broad individual differences) to engage in higher education, there is a wide variety of factors working toward disengagement.

Long before the entering college freshman began to think seriously about going to college, higher education was confronting him with a series of inescapable requirements. College preparatory courses were taken, not as a matter of conscious decision but rather as a mandate from the system. Too few individuals were encouraged to develop their intellectual skills in order to have a better chance of understanding themselves and the world about them. Instead, hard work was justified because it would lead to sufficiently high scores on college board examinations.

The freshman's eagerness is thus tempered by a long history of being conditioned to accept the inevitable demands of the system. The freshman year itself is a curious introduction to the contradictions inherent in the liberal arts curriculum. It has many of the same elements of emphasis upon preparation and absence of choice that the student experienced in high school. Yet it contains elements of a learning experience which can "set the student free." Many of them will come in contact with a teacher, a book, or another student who will have a profound impact on the student's thinking about himself or the world about him. Whether or not this experience will lead him to try to enlarge upon it and cultivate its ramifications will depend upon a whole host of factors. The student's past history will, in many ways, condition his response.

Yet the liberal arts college will itself be doing things to confuse the student and work against the avowed goals of a liberal education. Time is needed to pursue a thought and its ramifications through to some satisfactory stopping point. But when the happy occasion occurs that a student does get caught up in his work, he can go only so far with it because the demands of this or that of his courses require that his intellectual energies be directed elsewhere. Yet students continue to accept the frustration inherent in the system. In part, the explanation has already been suggested: their whole school experience has been training in how to trade something that may not be meaningful now for the promise of something better in the future.

Just as the academic experience in high school prepares the student to accept early contradictions inherent in the liberal arts curriculum, so does the early emphasis on career selection prepare him for this source of confusion at the college level. Confusion starts early over whether the liberal arts program is designed to prepare for a career or to encourage development of individual talent. From the time of filling out his application form, the student is asked what his interests are, what major he plans to elect, and what career he might pursue. While he is assured that he is not honor-bound to stay with any major he choses at this point or that, and may even elect a General Studies program for the first two years of college, there is, nevertheless, a clear emphasis upon his decision. This decision is focused, not on the optimal development of the student, but on an eventual career and how to complete college with credentials acceptable to a graduate school or a prospective employer. The emphasis is not on how the student can achieve the most benefits from his university experience.

Colleges which are part of prestige universities suffer from a disorder which is akin to a split personality when it comes to the operational definition of its goals. The best of all possible worlds is to be achieved when the aims of education are defined as being twofold: to provide a liberal education and to make available the best in specialized study. The prestige college is caught in the same cross-fire as the adolescent, because it defines its goals in light of the demands of the society which supports it. Whether these goals are compatible or even necessary is not raised as a serious question by these institutions for a set of very complex reasons. We will single out one of these reasons because it is central to the main theme of this chapter.

The faculty of prestige colleges are outstanding specialists in their fields and they are deeply committed to their professions. These men are in the forefront of their own areas of knowledge and, as a consequence, are often far removed from the level of understanding of the undergraduate. Not only is their own specialization a way of life for the faculty member, but it produces certain psychological consequences. One of these is the commitment to the value of specialized knowledge, which can become so one-sided that some faculty members secretly scorn the goals of a broad liberal education. Many introductory courses become reviews of past and present frontiers of knowledge without even considering the need of equipping the student for such expeditions into the unknown. Courses which are purportedly designed to enlarge the intellectual skills of the student and encourage new perspectives often become effective barriers for any further thought. Beyond their failure to contribute to the student's intellectual development, these courses also reinforce in his mind the value placed on specialized thought and the importance of developing some specialized skills of his own.

For many undergraduates, experience with the curriculum becomes a source of great disappointment, because they find it no more meaningful in their lives than the high school curriculum. Still, they are confronted with the many sources of pressure to decide upon a major and a career. How are they to arrive at an appropriate decision? In the next section, we will examine some of the efforts made by colleges to help their undergraduates choose wisely from the myriad of course offerings and integrate their academic experience so it will lead to some appropriate decision at the end of four years.

3. Personal search and the search for the personal.

In an ideal sense, the college is organized to encourage the student to search for intellectual understanding; this kind of personal search is often thwarted by the student's need to satisfy other demands that he feels are more important to him. Here the search for intellectual understanding takes second place to the student's need for acceptance and security. He becomes involved in a search for the personal satisfaction inherent in private goals and immediate rewards.

Freshmen arrive at college with widely divergent understanding of themselves, their talents, and their goals. Common to all is a set of questions dealing with the problem of how to give meaning to their lives and gain guidance toward some orderly path through the maze of contradictory pressures discussed here. Some students find meaning and order by narrowly defining what they want in terms of training for a career. Others are so diffuse in their goals, and have such complex problems of personal meaning to resolve, that their academic work is virtually isolated from their real lives. In both instances we have extremes of response which would be difficult for any college to handle completely adequately.

But the vast number of students who have the openness to consider actively the potential richness of the curriculum -- and the personal soundness to be responsive to new experiences -- college life could offer unparalleled opportunities for personal growth and intellectual development. Most college students could be encouraged to use these four years as an opportunity for the personal search which is the cornerstone of the liberal education. At the present time, the curriculum is so lacking in articulation and the course emphasis is so specialized that most students are forced to seek personal and private sources of meaning. This search takes them away from academic pursuits into the myriad realms of the extracurricular. Much of the passion and curiosity of the college student is, consequently, tied to friends, causes, and activities.

There has always been a tacit recognition of the existence of these two cultures: the academic culture, defined by the classroom, and the many student cultures.

The importance of the academic culture is continually emphasized for the student by all those forces which indicate that the future will largely be determined by how well he performs now. This future importance dramatizes the fact that day-to-day work often lacks significance. Even more serious is the difficulty students face in sensing the relevance of present work to that of the future. The more resilient among them can play the academic game and pursue the more meaningful side of their lives as well.

Colleges do make some effort to help students integrate their undergraduate experiences. There is some realization that students vary tremendously in their degree of independence and need for guidance. In many colleges, the underlying concept of providing a faculty advisor is, in a sense, an attempt to change the search-for-the-personal into a personal search. Implicit in this system is a recognition of the fundamental importance of a human relationship as an aid to individual growth and development.

The significance of a meaningful relationship between student and advisor is emphasized by the discrepancy existing between the goals of the university and those of the student. We have already touched upon the many contradictions resulting in the continuous creation of the two cultures. The real world for the student consists of questions about himself, his place in the world, and how his education can be related to his long-term goals. For the faculty, it consists in a commitment to specialized knowledge with a high degree of involvement in the specific work. The advisor must find a way of integrating the two worlds for his students.

The models for this kind of relationship vary from what might be considered a business-like information booth in the department store of knowledge to a well-informed museum guide, who knows and loves all he describes. To the extent that the advisor gives information, it is incumbent upon the student to ask the right questions. To the extent that the advisor can give of himself to act as an interested guide, it requires that the student be a receptive listener and have the sophistication to share the advisor's enthusiasm. When it becomes clear that most students have neither the right kind of enthusiasm nor well-articulated questions about the curriculum, the potential for a meaningful human relationship often stops and the exchange of signatures begins. The relationship between advisor and student is often a source of great frustration for both. If the advisor is at all seriously concerned with the student, he cannot understand why all the virtues of the educational system are not apparent and embraced. The student quickly perceives that, although he is in a face-to-face encounter with his advisor, their relationship is still essentially formal and confined to the well-defined roles of teacher and student.

Most universities also provide their students with a wide variety of other individuals with whom a personal relationship is possible. These are found in residence halls, the Deans' offices, and Counseling Centers. Very broadly defined, professionals in Student Personnel Services have little or no relationship to the academic life of the student. Such lack of connection with the "main" currents of the university makes it abundantly clear to students that here is another instance of the two cultures on campus. Some may, in fact, find their most meaningful adult relationship in this sector of the university, but the relationship seldom helps them integrate the world of classroom learning with that of other student concerns.

Conclusion

Our data have provided us with a segment of the life history of one college class. On the surface, the fact that 65% of the men are pursuing advanced degrees might be a source of satisfaction. But this satisfaction can be enjoyed only in the abstract. Below the surface it is evident that the students' choices are not so much an indication of wise planning as the result of a need to stay in step with a demanding time table.

The high level of talent represented in the entire class here described brings into sharper focus the loss involved by failure of an individual to pursue a direction intrinsically meaningful to him. The loss is most obvious with those men and women who have failed by the standards of the system. There is, however, an equal loss to the "successful" student whose decision was inappropriate for him.

In an effort to place these data in context, we have outlined some of the conflicting forces operating on the student. In a way it is inevitable that large numbers of our students will not have had adequate opportunity to examine their career plans critically, because nowhere are they encouraged to do so. Their experience is filled with mixed messages. So many different, equally powerful, often contradictory positions are presented to the student that efforts to help him as an individual tend to be remedial -- perhaps even temporary and often time-consuming. The pressures to conform are too great for many individuals to resist successfully. If widespread changes are to be effected, all segments of the institution must themselves be genuinely committed to encouraging the individual to explore and to grow.

APPENDIX

Pattern Analysis of the Strong for Individuals With Different Probable Future Occupations

	1 (Prim)	2 (Sec)	5 (Other)	9 (Rej)
Actor and Entertainer				
Biological Sciences			2	
Business Contact	1		1	
Business Detail			2	
Physical Sciences			1	1
Social Services			1	1
Technical			2	
Verbal Linguistics	1	1		
Architect				
Biological Sciences	2	1	5	
Business Contact		2	6	
Business Detail		2	6	
Physical Sciences		2	6	
Social Services			8	
Technical	1		7	
Verbal Linguistics	1	2	5	
Biological Scientists				
Biological Sciences	1		1	
Business Contact			2	
Business Detail		2	2	
Physical Sciences	1		1	
Social Services	1		1	
Technical		1	1	
Verbal Linguistics		1	1	
Business				
Biological Sciences	1	1	19	5
Business Contact	4	7	15	
Business Detail	4	9	13	
Physical Sciences		1	21	4
Social Services	3	2	20	
Technical		3	22	1
Verbal Linguistics	2	4	20	
Business Executive				
Biological Sciences			10	10
Business Contact	9	6	5	
Business Detail	4	8	8	
Physical Sciences			13	7
Social Services		2	17	1

Appendix (cont.)

	1	2	5	9
Business Executive (cont.)				
Technical			18	2
Verbal Linguistics	3	5	12	
Chemist				
Biological Sciences	2	3	3	
Business Contact			8	
Business Detail		1	7	
Physical Sciences		2	6	
Social Services	2	1	5	
Technical		1	7	
Verbal Linguistics	1	3	4	
College Professor (scientist)				
Biological Sciences	2		1	
Business Contact			3	
Business Detail	1		1	1
Physical Sciences	2		1	
Social Services			3	
Technical		1	2	
Verbal Linguistics		1	2	
College Professor (teacher)				
Biological Sciences	3	2	11	
Business Contact	1	1	14	
Business Detail			15	1
Physical Sciences	3	3	9	1
Social Services	1	4	11	
Technical	1		14	1
Verbal Linguistics	8	5	3	
Engineer				
Biological Sciences	12	12	40	3
Business Contact	2	10	55	
Business Detail	6	11	49	1
Physical Sciences	12	9	45	1
Social Services	1	5	51	10
Technical	11	10	46	
Verbal Linguistics	3	5	59	
Engineer (business, sales)				
Biological Sciences	1	1	6	
Business Contact		2	6	
Business Detail		1	7	
Physical Sciences	1		7	
Social Services			7	1

Appendix (cont.)

	1	2	5	9
Engineer (business, sales) (cont.)				
Technical	1		7	
Verbal Linguistics	1		7	
Foreign Service				
Biological Sciences	1	2	20	
Business Contact	5	9	9	
Business Detail	2	1	20	
Physical Sciences			18	5
Social Services	6	6	11	
Technical		1	21	1
Verbal Linguistics	9	5	9	
Journalist				
Biological Sciences		1	5	
Business Contact	1	2	3	
Business Detail	1		5	
Physical Sciences		3	5	1
Social Services			6	
Technical		1	4	1
Verbal Linguistics	3	1	2	
Lawyer				
Biological Sciences	1	3	61	16
Business Contact	27	17	37	
Business Detail	11	14	55	1
Physical Sciences		1	56	24
Social Services	15	16	46	4
Technical		3	72	6
Verbal Linguistics	22	19	40	
Mathematician				
Biological Sciences	2	4	13	
Business Contact		1	18	
Business Detail	2		16	1
Physical Sciences	7	4	8	
Social Services		3	14	2
Technical	1	3	15	
Verbal Linguistics	3	5	11	
Military Service				
Biological Sciences	1	1	6	
Business Contact	2		5	1
Business Detail		1	7	
Physical Sciences		1	7	
Social Services	1		6	1

Appendix (cont.)

	1	2	5	9
Military Service (cont.)				
Technical	2		5	1
Verbal Linguistics	2	2	4	
Physician				
Biological Sciences	27	26	39	1
Business Contact	4	12	77	
Business Detail	3	10	71	9
Physical Sciences	13	9	70	1
Social Services	16	15	54	8
Technical	4	8	80	1
Verbal Linguistics	19	24	50	
Physicist				
Biological Sciences	8	10	11	
Business Contact		4	25	
Business Detail			28	1
Physical Sciences	14	6	9	
Social Services		3	22	4
Technical	3	5	20	1
Verbal Linguistics	5	10	14	
Teacher				
Biological Sciences	4	5	19	
Business Contact	2	2	24	
Business Detail		2	25	1
Physical Sciences	2	5	18	3
Social Services	4	9	15	
Technical	1	1	24	2
Verbal Linguistics	9	8	11	
Other (double majors)				
Biological Sciences	12	4	53	3
Business Contact	10	6	55	1
Business Detail	4	6	60	2
Physical Sciences	9	5	47	11
Social Services	12	15	41	4
Technical	1	4	63	4
Verbal Linguistics	21	19	32	
Undecided				
Biological Sciences	14	16	74	7
Business Contact	19	17	75	
Business Detail	5	13	86	7
Physical Sciences	16	5	73	17
Social Services	12	20	73	6

Appendix (cont.)

	1	2	5	9
Undecided (cont.)				
Technical	2	9	94	6
Verbal Linguistics	26	34	51	
No Response				
Biological Sciences	17	20	74	8
Business Contact	11	15	93	
Business Detail	4	13	94	8
Physical Sciences	13	14	83	9
Social Services	11	24	78	6
Technical	4	12	99	4
Verbal Linguistics	28	31	60	

Chapter IX

CONGRUENCE AND DEVELOPMENTAL CHANGES IN AUTHORITARIANISM IN COLLEGE STUDENTS

Max M. Levin, Ph.D.

METHODOLOGICAL ISSUES IN STUDYING STUDENT CHANGE

Studies of change during the college years have been largely descriptive, focusing on the nature and extent of changes in values, beliefs and attitudes and, to a lesser extent, on personality characteristics. Additionally, there has been interest in effects of different types of colleges or universities on student cultures and sub-cultures. Essential as these studies are, as customarily undertaken they cannot provide answers to specific questions about causal relationships. Webster, Freedman and Heist (1)* indicate a number of limitations in their closely reasoned chapter in The American College:

> "In most of the studies, it can be seen that three kinds of problems have been superimposed; these concern the changing social conditions, the diversity of personality characteristics of students, and the educational programs and climates of colleges."

To these must be added the critical limitation, also recognized by these authors, of the absence of comparable control groups. As a consequence, it is difficult to assess whether and to what degree change is a function of the college experience (let alone what aspects of it) or a consequence of development alone in a maturational sense, or extra-college experience. The provocative studies of dogmatism, ethnocentrism, and authoritarianism by Plant (2) (closely related characteristics, of course) were designed to study in the first instance the extent to which changes in these occur in individual students rather than only in populations of students who complete college. The latter could occur by selective attrition resulting in differential rates of non-graduation among students who differ in their dogmatism and related characteristics. In their studies of non-college students as well as students with varying amounts of college attendance, Plant and Telford (3) found that all groups showed significant declines in these characteristics, which raises questions about the effect of college in contrast to developmental and other non-college factors.

Campbell's (4) penetrating analysis of the vexing problems of moving from descriptive studies of change to inferring causal relationships should be considered by investigators of higher education. Some of his ideas among others are included in the following discussion.

We might look at being in college as an instance of what Campbell calls an "interrupted time series experiment." Consider the diagrammatic representation in Figure I, adapted from Campbell, of the possible courses of change with respect to a psychological attribute - say, liberalism or intensity of intellectual interests. A longer time series than one or even four years of college might reveal that observed changes are associated with factors other than college attendance.

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* References are listed on pages 470-471.

Changes in Group A may reflect little more than continuing maturation.

Group B may reflect only transitional change while in the college environment, only to return to pre-college attitudes following graduation. This phenomenon is close to Murphy's situationism (5). Such situationism underlies the view that the trouble with college students is that they become alumni.

When we turn to Group C we find quite a different condition. Here no demonstrable change is apparent during the college years. It is only later that the presumed effects of college may be observed. In some attitude change studies such findings have been termed the Sleeper Effect. It is reminiscent of Tolman's conception of latent learning: learning that is not manifest but can be shown to occur in performance only under appropriate conditions.

Group D illustrates what Campbell would probably consider a fact of history. There may be cyclical - or other - historical changes; for example, in liberalism or intellectual values. If students are studied during a particular phase of history, changes in these values may reflect a particular historical change. Later, they may respond to yet another historical shift; it may thus be largely a matter of coincidence. Students during a period of alliance with the Soviet Union during World War II, for example, might express different attitudes towards communism than during the Cold War period and McCarthyism. Such historical shifts need not be limited to political values or attitudes. Intellectual and other values might similarly be affected, as might even career interests.

Group E, finally, might be the only case of "pure" college effect.

Thus, in many instances, it is difficult indeed to attribute effects of change over a one or even four-year interval to the college experience - or other intervening events - unless we have studies designed differently than many now available.

Properly matched control groups, especially non-college, have been suggested as a solution. But this will obviously not resolve all methodological problems, the most baffling being the determination of what among the myriad of variables impinging on students had what consequences for what types of students. In recent years some studies have attempted to become more analytic. Included in such efforts are comparisons among colleges known or believed to differ in significant ways (6, 7, 8) or the attempt to study the behavior

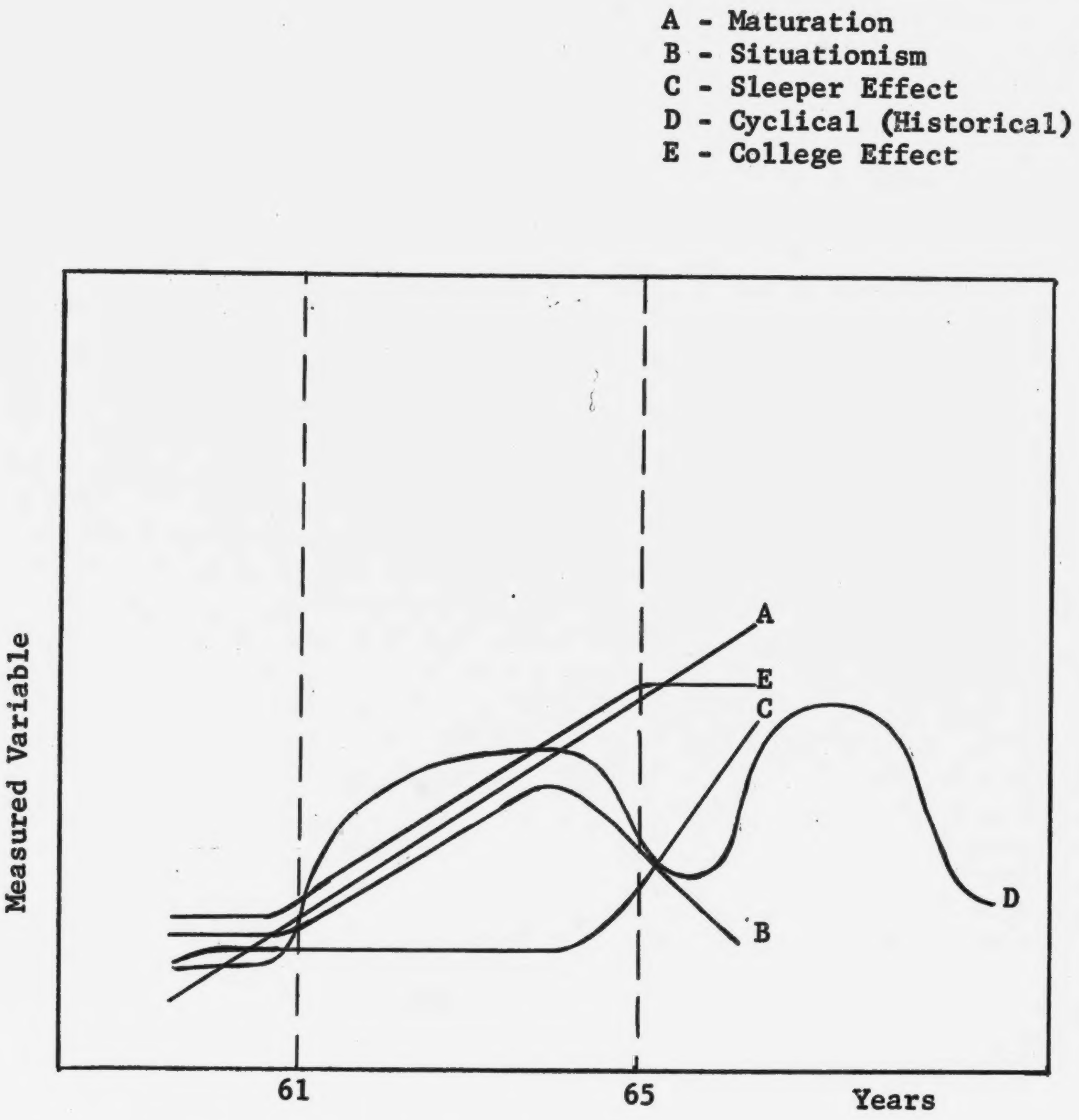

Figure I: Change During the College Years

of students differing in such significant personality or ideological characteristics as stereopathy-authoritarianism (9). The comparison of differing student sub-cultures within a given college or of presumed comparable students in differing institutions, are other methods for isolating somewhat - probably ever so little - the number of variables. While such procedures can obviously never approximate the isolation and control of variables possible in experimental techniques (perhaps a dubious goal for research into personality development), they do point in the direction of more rigorous, analytic approaches which would still not preclude naturalistic observation and the appropriate study of complex phenomena.

One research method to our knowledge thus far unused - or at least unreported although often recommended in research surveys and conferences - is the comparison of students who show change along specified dimensions with comparable students in the same institution who show little or no change in these same characteristics. Comparison of such groups in terms of their other characteristics and experience could then be utilized to discover predictor variables. Analysis of background factors, personality characteristics, social and educational experiences, should then suggest what variables are associated with change and non-change.

But the matter is not so simple. There are, in the first place, the ever baffling statistical problems which appear almost insurmountable. As Bereiter (10) puts it: "Procedural decisions in the measurement of change assume with discouraging insistence, the character of dilemmas of choices between equally undesirable alternatives." Many, but not all, of these dilemmas result from the fact that individuals start with different initial standings and there are often intrinsic relationships between change and initial level. Given the nature of most instruments for psychological measurement, the measurement of change at different parts of scales presents additional difficulties, not the least of which are the well known errors in measurement and differential regression effects. For the present and until such statistical and psychometric problems are solved we can do little more than allow for uncertainty in our interpretation of obtained results. Fortunately, we can assume that some of the problems are less severe in measuring and comparing change in matched groups than in individual cases. We can also be justifiably somewhat less rigorous when beginning the search for significant antecedents and correlates of change than when testing specific hypotheses.

In the light of these methodological considerations, it was decided to locate a measurable (and hopefully significant) student characteristic which could be used as the basis for setting up groups of students similar as freshmen, but who during the course of the four college years would diverge with respect to the given characteristic. Sub-groups could then be set up that would differ significantly. By comparing how they differed with respect to their college experience, the effects of these specific aspects of college could be isolated and studied empirically.

Since the formulation of a developmental personality theory for the college years was one major goal of the Student Development Study, a significant personality dimension seemed most appropriate. If the dimension studied, furthermore, was general enough, the findings might also have relevance for understanding development and change processes in other dimensions of personality as well.

For a variety of reasons we chose to analyze change with respect to authoritarianism.[1] Despite the many technical criticisms leveled against the California Authoritarianism Studies, their provocative theory, techniques, and findings continue to be challenging. Relating ideology to personality was, according to Brown (11), a severe but not unfriendly critic, strikingly original. While others since write somewhat vaguely about values and personality (the two terms appear almost to be used interchangeably by some investigators), the original theory of authoritarianism provides a coherent framework describing relationships between a character structure, values, and attitudes. It thus remains a fruitful field of inquiry for those interested in problems that border on personality and social psychology and it continues to be a major social and educational problem.

There are a number of questions about authoritarianism which continue to merit study. For example, is authoritarianism essentially little more than conventional attitudes learned during adolescence in particular socio-cultural milieus but readily modifiable in a new climate of opinion? Conversely, is authoritarianism or aspects of it more closely linked to character structure, relatively enduring or even non-modifiable? Further, are there aspects of authoritarianism that are largely developmental as suggested by Sanford (13) and Loevinger (14), e.g., the changes in authoritarianism

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1. An adequate consideration of the nature of authoritarianism is beyond the scope of this chapter. The interested reader should consult the major report of the California investigators, Adorno et al, the Authoritarian Personality(12). For the purposes of this report it may be sufficient to indicate that authoritarianism refers to a cluster or clusters of personality traits, which predispose a person to a basically antidemocratic ideology. Such a person is inclined to be irrationally submissive to authority, deriving pleasure from obedience and conformity; he is inclined to divide his world into ingroup-outgroup categories, to be suspicious, and even hostile to various outgroups. He is inclined to be dogmatic and rigid, intolerant of ambiguity and complexity, and to be anti-intellectual, anti-scientific, and superstitious. He is inclined to be punitively moralistic and to espouse conventional virtues, although not without frequent inconsistencies. He deals with his own impulses typically with little insight, denies certain needs, particularly dependence, weakness, and often sexual urges. These are typically projected onto outgroups resulting in prejudice. He is inclined to be suggestible - even gullible particularly to conventional and ingroup authority, often lacking autonomy and independent critical judgment. This condensed formulation, however, does not do justice to the diversity of types and syndromes.

between the freshmen and senior years in college. To what extent, furthermore, do such instruments as the F scale tap any or all of these possible aspects or kinds of authoritarianism?

It is still asserted by some that authoritarianism is largely a sociological phenomenon (15): "The traits of the authoritarian cohere simply because they are norms of people with little education and low SES" (Socio-Economic Status). A study of the nature and course of change in authoritarianism among highly selected college students should throw light on the adequacy of a purely sociological explanation. Obviously, students who qualify for admission to such institutions as Stanford and the University of California at Berkeley are not likely to have had little education. Furthermore, if despite their education at these institutions, their authoritarianism persists, we are dealing with more than educational or sociocultural deprivation.

Despite the suggestions in the original California studies of different types of authoritarianism, research has not pursued the questions of types. Instead, the spate of research has dealt with technical measurement problems. Intensive studies which might throw further light on the nature of vicissitudes of authoritarianism have been rare. As a consequence the more significant contributions to the theory of personality and ideology have not been furthered in new empirical work. The variety of data in our Student Development Study, it was hoped, could be usefully applied to clarify some questions concerning the nature of authoritarianism and changes in it.

The present study, as will be evident, is largely empirical.[2] While it would be desirable to begin with a theory of change in authoritarianism, this seemed somewhat premature. For the age group studied such a theory would require more developed theory than is now available about at least the following:

(1) personality development during the late adolescent and early adult years;

(2) a more careful delineation of types of authoritarianism such as attitudinal-situational, developmental and relatively enduring characterological;

(3) the nature of learning and change in cognitive styles, defense mechanisms as well as attitudes, non-curricular influences, including peers and other social influences, and so on.

A coherent theory would require some integration of postulates and constructs from the above from which specific hypotheses could be formulated for testing.

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[2] All p values reported are accordingly two-tailed.

Instead we were guided by questions which although they could be (and often are) put in hypothetical form would not really constitute strictly theory-derived hypotheses. Our questions probably can be considered to be informed or derived from incomplete theory. They can be grouped under the following topics or variables:

(1) General background factors.
(2) Personality characteristics.
(3) College experiences.
(4) Types or dimensions of authoritarianism.

At this stage of the analysis, only some probes have been made into these areas. For example, in the instance of background factors we have thus far considered only father's occupation as an index of socio-economic class. Other possible social variables - where data are available - remain to be analyzed; similarly for the other categories.

PROCEDURE

In the light of numerous reports (including the results of the present study) that authoritarianism tends to decline during the college-age years, change would be most likely among those who upon entrance are relatively high. Further, a relatively high group would, it was assumed, include students whose authoritarian characteristics would likely change in varying degrees from substantial decline to no change and possibly even increase. Groups of students with low or average authoritarianism scores might also manifest change. However, other findings as well as theory suggest that change is less likely than for relatively high F scorers.

The present study is limited to male students. As it turned out, it was necessary to combine students from both Berkeley and Stanford. While a separate analysis of the two institutions would have been preferable, the resulting samples would have been too small. In the various analyses to be described, no differences were apparent between these two sub-samples.

The 32-item F scale used in the Student Development Study is adapted from Form 40 described by Sanford et al (16). This form has high reliabilities ranging from .81 to .97 for various samples, averaging about .90. Means for the Berkeley and Stanford freshmen who also had been retested as seniors were 115 and 110 respectively, with standard deviations of approximately 26 and 24. (These means were not significantly different from those of a random sample of the students who were tested as freshmen only at Berkeley and Stanford: 117 and 113.) Subjects whose scores were approximately one standard deviation or more above the group means were selected. The cut-off was thus 139 (item mean, 4.34), relatively high these days for most reported college students. This yielded a total of 68 subjects with usable freshman and senior F tests.

This group was subdivided into two subgroups: 45 large changers (LC) and 23 with lesser amounts of change or small change (SC) on the basis of whether the difference between freshman and senior scores was above or below 25. As will be shown later, this proved to be an unwise criterion since the LC group so constituted included some students whose senior scores on F were not substantially different than some in the SC group. As groups, however, they differ significantly as shown in Table I. While their freshman F scores do not differ significantly, as seniors the differences are marked. The means for the LC group declines from 149.1 to 104.5, while the means for the SC group declines to only 133.7 from 146.3. Thus, while the change in both groups is statistically significant, there is substantial difference between them with respect to amount of change. Nevertheless, even the LC group as seniors are still higher than the overall senior means of 92.1 and 95.2 at Stanford and Berkeley respectively.

Table I

Means, Sigmas, ts for Freshman and Senior F Scale Scores for LC, SC Groups

	Freshman Means	Sigmas	Senior Means	Sigmas	t[1]
LC (N = 45)	149.1	10.9	104.5	16.8	9.63[2]
SC (N = 23)	146.3	5.9	133.7	10.8	5.56[2]

[1] Calculated for correlated means
[2] $p = .001$

Table II

Large Change and Small Change Among High F Scorers at Berkeley and Stanford

	Berkeley		Stanford	
	N	%	N	%
LC	32	(65)	13	(68)
SC	17	(35)	6	(32)
	49		19	

Amount of change among relatively high F scorers is remarkably close in the two institutions despite what stereotypes might exist about the differences between these two universities. If one sample can be seen as replicating the other, we may have an estimate of change for high Fs in college (or during the college years):

two-thirds will decline at least 25 points. The larger number of relatively high F's at Berkeley is, of course, a function of the larger sample originally tested and retested at the two institutions.

FACTORS ASSOCIATED WITH CHANGE

A few precautions about the findings before we turn to the central question: What accounts for the differing amount of change in these students?

1. Our Ns are small. Apart from statistical limitations, we can hardly anticipate that such small Ns will sample or incorporate all manner of variables (experiential and subject characteristics) that might under varying circumstances and contingencies be associated with change in authoritarianism.

2. Comparable information was unfortunately not always available on all subjects: Some, for example, did not provide complete information about father's occupation nor were there always complete data about majors. It will be noted, therefore, that the LC and SC groups have fluctuating Ns in various comparisons. This, coupled with relatively small N in various categories, made adequate statistical treatment of the data difficult. Possibly some of the outcomes might, with larger Ns, prove statistically significant although they do not appear so with the data at hand.

In view of the above considerations, this study and the findings are clearly preliminary and tentative but hopefully of value in developing new hypotheses concerning specific determinants of change in authoritarianism.

We might expect the significant variables accounting for change to be either (1) intrinsic or initial characteristics of the students, or (2) aspects of his student career; that is, educational and social experiences during his college years, or (3) factors intrinsic to the developmental process with respect to authoritarianism. We have attempted to tease out as many of these variables as were available in our data. Many theoretically plausible factors are, however, not available for analysis.

A. Sociocultural Background.

Turning first to an initial characteristic of the student related to social class membership, father's occupation during the student's senior year is presented in Table III.

This index of social class membership is little more than suggestive on two accounts. The differences are not statistically significant. Equally suggestive, however, is the use of such a crude index as father's occupation as the sole criterion of social class membership. Class membership is a complex social psychological variable affected by a host of factors: education, income, family status in the community, mobility, similarity and discrepancy between maternal and paternal backgrounds and the like.

Table III

Father's Occupation

	LC		SC	
	%	N	%	N
Professional	21	(8)	9.5	(2)
Business	47	(18)	71.0	(15)
White collar or skilled worker	24	(9)	9.5	(2)
Other	8	(3)	9.5	(2)
		38		21

Nevertheless, the greater amount of change among the offspring of non-business families suggests the possible role of intellectual background as a possible determinant. Coupled with the findings to be presented later which indicate that students who are more intellectually and aesthetically oriented seem more receptive to the liberalizing influence of the college, we are inclined to formulate a hypothesis for further research: the influence of college - at least with respect to authoritarianism - will vary directly with the membership group of the family and with the intellectual-aesthetic disposition of the student. This would assume that the students whose fathers' careers are in the business world would be characteristically lower in intellectual or aesthetic orientations and are accordingly apt to be resistant to change in some basic values. Testing such a hypothesis would require demonstrating a relationship between change and intellectual disposition in the student as well as the relationship between such disposition and father's occupation.

The hypothesis presented may seem obvious. On theoretical and common sense grounds, however, an opposite hypothesis might also be posited. It could be asserted that a basic change in authoritarianism could only occur in the presence of considerable and generalized conflict and dissonance. The conflict or crisis theory of change has considerable support in personality and social psychological theory. Our findings incline us to favor a congruence theory: Where major aspects of a student's goals or dispositions are initially congruent with those of the institution, he is more likely to be influenced and undergo change in the direction of the institution's values and norms.

B. Scholastic Aptitude.

Numerous studies have indicated a positive relationship between intelligence, educational level, and measures of authoritarianism. Whether intelligence is associated with change is, to our knowledge, not reported in the literature. The only measures we have related to these variables are the Scholastic Aptitude Test Scores and grade point average.

Table IV

SAT Scores and Grade Point Averages in LC, SC Groups

	LC	SC
SAT (Verbal)	544	540
SAT (Math)	618	627
Grade Point Average (Stanford)	2.85	3.13
Grade Point Average (Berkeley)	2.69	2.22

The differences between the LC and SC groups are minimal, with opposite grade point averages at Berkeley and Stanford. With a wider range of aptitude and grade point averages different results might obtain. Thus, if we had retest scores on those who did not graduate, for example, we might find some differences. But our procedure of retesting during the senior year may have excluded students whose aptitude - or at least academic performance - was associated with non-graduation. Perhaps among these might be found a higher percentage of relatively high authoritarians who were non-changers.

C. Related Personality Characteristics.

The underlying theory of authoritarianism in the original studies of Adorno, Frenkel-Brunswik, Levinson and Sanford is largely a personality theory, based on the psychodynamic principles of psychoanalysis with some recognition of socio-cultural factors. Within this framework it would be plausible to assume that some personality traits might be associated with susceptibility to influence and change in authoritarianism. What precisely such traits might be can only be guessed at since a theory of personality change in terms of characteristics in individuals that render them more or less susceptible to change under specified conditions is yet to be developed. Some such general notions as rigidity and ego strength suggest themselves. But in the case of authoritarianism these very traits are presumably essential components of authoritarianism. Thus, change in authoritarianism involves change in precisely such traits as rigidity, dogmatism and the like. What other personal characteristics are associated with mutability in such traits can only be guessed at.

Our data include a number of personality scales of the Omnibus Personality Inventory (OPI) administered upon entrance as freshmen and readministered during the spring of the senior year. We might view the freshmen OPI differences between the LC and SC groups as possible predispositions or correlates of change while the differences in the senior OPI represent personality changes associated with, or the consequences of, change in authoritarianism.

Table V

Freshman OPI, F, E Means, Sigmas, t's for LC, SC Groups

	LC (N=44)		SC (N=23)		t's
	Means and Sigmas (Standard Scores)		Means and Sigmas (Standard Scores)		
Social Maturity	42.0	(8.8)	37.7	(7.5)	2.02[1]
Impulse Expression	47.6	(10.4)	46.7	(10.1)	n.s.
Schizoid Functioning	51.4	(9.7)	54.2	(10.1)	n.s.
Masculinity-Femininity	52.1	(9.4)	51.9	(10.6)	n.s.
Estheticism	47.8	(8.1)	42.8	(8.8)	2.42[2]
Developmental Status	43.0	(9.1)	41.7	(8.5)	n.s.
F	149.1	(10.9)	146.3	(5.9)	n.s.
E	71.6	(16.8)	77.0	(17.1)	n.s.

[1] p = .05

[2] p = .02

Considering first our sample of relatively high Fs as a whole, it is clear that they differ significantly from Stanford and Berkeley freshmen in other respects as well. (The latter, of course, have standard scores of 50 and SDs of 10.) Both the LC and SC groups are significantly lower on measures of Social Maturity, Impulse Expression, Estheticism and Developmental Status. On the other hand, their scores are higher for Schizoid Functioning[3] (which, of course, is not to say that they are more schizophrenic), Masculinity, and Ethnocentricism. These findings indicate that authoritarianism as measured by F is a fairly pervasive syndrome related to other and diverse measures of personality traits. An understanding of the determinants of change in F might accordingly be of significance in understanding change in many related personality variables.

Turning now to a comparison of the LC and SC groups, they differ significantly from each other on only two of the OPI scales. These findings merit detailed discussion since they form the basis, along with several other findings, for a major hypothesis concerning an aspect of change in authoritarianism during the college years.

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[3] Currently more appropriately designated Social Alienation by the staff of the Center of Research and Development of Higher Education at the University of California at Berkeley.

Social Maturity, the scale developed by Webster, Sanford and Freedman as a part of the Mellon Foundation Research Project of Vassar students, was viewed by them as a new instrument for the study of authoritarianism (17).

They cite several reasons for developing a new instrument. The limited number of items in the F scale as well as the complex nature of these items suggested the need for a longer scale which would be useful in further studies of the nature of authoritarianism. Because most of the items come from widely used personality instruments, such as the MMPI and CPI, they assumed that the new instrument would be "less ideological and more personality-centered than the F scale" since it included, except for about 12 or 13 items, typical personality scale items which have apparently nothing to do with current issues in the areas of politics, economics, or social relations... Scores on the present scale would be less dependent upon the individuals contemporary culture or group memberships than is the case with the F scale.

SM was incorporated by the research group of the Center for the Study of Higher Education[4] in the Omnibus Personality Inventory, now the most extensively utilized personality inventory for the study of personality development during the college years. Beginning as a non-ideological measure of non-authoritarianism, it was later dubbed a scale of Social Maturity[5] by Webster.

In the research manual (18) for the Omnibus Personality Inventory, the scale is described as:

"Social Maturity (SM)(144 items): High scorers are not authoritarian, and they are flexible, tolerant, and realistic in their thinking. They are not dependent upon authority, rules or rituals for managing social relationships. In general they are impunitive, althouth capable of expressing aggression directly when it is appropriate. *High scorers are also frequently interested in intellectual and esthetic pursuits."* (our italics)

SM correlates, nevertheless, quite highly with scores on the F scale: .73 for the original sample of Vassar freshmen women, 174 for a cross validation sample of freshmen obtained a year later. The authors conclude that "when allowance is made for unreliability, the 149 items have about three-fourths of their true variance in common with F." In our own findings the correlations are very similar: .76 for Stanford male freshmen, .73 for Stanford female freshmen; .67 and .75 for Berkeley male and female freshmen respectively.

While SM is thus largely a measure of authoritarianism, it taps to some extent other attributes as well. Presumably it is these other attributes that should account for the differences in

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[4] Now the Center for Research and Development in Higher Education, University of California at Berkeley.

[5] An abbreviated form is now designated an Autonomy scale by the Center.

SM between the LC and SC groups (after allowance is made for some unreliability in the measures of authoritarianism in both the F and SM scales).

A comparison of items in the SM which significantly differentiate LC and SC subjects indicates that these are on the whole in the intellectual-esthetic domain. A sample of 23 subjects in the LC groups was compared with the 23 subjects comprising the SC groups on 120 items of the SM scale. The items which approach statistically significant differences are presented in VI.

Table VI

SM Items Differentiating 23 Subjects in LC and SC Groups
(Numbers in each group agreeing with the item.)

	LC	SC	X^2
Trends toward abstractionism and the distortion of reality have corrupted much art in recent years.	8	14	3.14^1
I like to listen to primitive music.	11	4	3.56^1
I like to discuss philosophical problems.	13	7	3.19^1
I like to read about artistic or literary achievements.	11	4	3.56^1
Nothing about fascism is any good.	12	3	6.33^2
It's better to stick by what you have than trying new things you don't actually know about.	8	14	3.14^1

$^1p = .05$

$^2p = .01$

When comparing two groups on 120 items, one may, of course, expect to find some differences to be significant as a result of sampling errors alone. But there is a consistency in the content of these items that suggest we may be dealing with more than sampling errors. Three of the six items concern esthetic content, particularly that which is new (or primitive), in any event, somewhat unconventional. And this is, moreover, consonant with the significant difference in Estheticism, the only other scale in the OPI that differentiates the LC and SC groups as freshmen.

What to make of the differences concerning fascism? At first blush it might be asserted that the greater absoluteness concerning fascism on the part of the LC group is the reverse of what would be predicted. If this is more than an error of sampling on one item, there is the possibility that being strongly opposed to the authoritarian ideology of fascism is among college freshmen associated with eventual greater anti-authoritarianism. Greater tolerance of fascism under these conditions, on the other hand, is associated with more enduring authoritarianism. Put another way, this may suggest that the SC group is conceivably more ideologically (politically) authoritarian than the LC group.

D. College Experience.

It is widely assumed that it is the collegiate experience - or some aspects of it - that accounts for the increased liberalization of various beliefs and attitudes. If so, one should expect that the LC and SC groups might have had quite different experiences.

For most of our subjects information about many aspects of their student careers was available in the Senior Questionnaire administered during the spring of their senior year. The two groups were compared on some 70 items dealing with a variety of attitudes, experiences, and activities during the college years.

Significant differences were obtained on only two items, far fewer than would be expected by chance alone. The LC group is more apt to evaluate courses in terms of their contribution to the subject's career while the SC group attaches more importance to grades. ($p - .001$). Secondly, students in the LC group are more likely to attribute the changes they have undergone to ideas in books they have read of their own than does the SC group. ($p = .05$). Since these two differences do show coherence and are in line with the higher intellectual disposition of the LC group, it is likely to be more than a chance finding.

But what are we to conclude from the absence of any other findings of differences in the college experience? It is likely that what is required is much more detailed and subtle information about college experiences than was included in the Senior Questionnaire. Such information will probably require very close and direct observational and interview study of many aspects of the college career to determine how the college experience differs for students who do and do not change.

E. College Residence.

To the extent that the various student housing arrangements are associated with particular subcultures we would anticipate that housing arrangements might well affect students' authoritarianism. Siegel and Siegel (19) did, indeed, demonstrate that F scores among Stanford women varied with the housing they aspired to, a reflection in part of their value orientation. More than this, actual living in particular types of housing was predictably associated with change in F scores in the direction of the group norms of a particular housing group. As the Siegels conceptualized it, the membership group - a particular housing arrangement - had an effect over and beyond the reference group, the particular kind of housing aspired to.

Our analysis of the effect of housing arrangements on changes in F is weakened by the need to combine the Stanford and Berkeley arrangements. Those who live off campus or in a fraternity may represent quite different value orientations at the two institutions.

Table VII

Residence for LC and SC Groups

	LC		SC	
	%	N	%	N
Fraternity	27.5	(11)	35	(8)
Dormitory	17.5	(7)	22	(5)
Off Campus	42.5	(17)	30	(7)
Home	7.5	(3)	9	(2)
Other	5	(2)	4	(1)

These differences are not statistically significant. Yet there is a suggestion that living off-campus in independent housing is somewhat more associated with change than dormitory or fraternity or other arrangements. Why this should be so in the face of the findings of Siegel and Siegel, as well as sociological theory, is unclear. To be sure our groups are males and relatively high in their authoritarianism while the Siegels' study was limited to women (perhaps more susceptible to conformity pressures) with a wider range of F scores. Conceivably, too, various residential arrangements no longer represent as homogeneous subcultures as was formerly the case. Plant (20), for example, has recently reported no differences in amount of change in F scores over a two-year period between sorority and non-sorority members.

F. The Major.

Of all aspects of collegiate education, the curriculum, it might be assumed, should be the most significant factor in changing basic belief systems. An adequate analysis of the role of the curriculum would ideally require a detailed study of many elements of courses and course content in the major as well as other required courses and electives. With respect to their effects upon change in students' values and beliefs, the particular perspectives and ideologies of various departments would need to be known. Despite its inappropriateness, dogmatism in thinking could appear in the teaching of any department. Non-dogmatic, non-punitive, humanistic qualities could equally well appear in various disciplines. Unfortunately, our data do not include such variables; we can only at this point analyze the effects of the major.

Table VIII

Majors for LC, SC Groups

	LC		SC	
	%	N	%	N
Natural Sciences	24	(10)	10	(2)
Social Sciences and Humanities	22	(13)	35	(7)
Engineering	15	(6)	20	(4)
Business	7	(3)	15	(3)
General Studies and Others	22	(9)	20	(4)
		41		20

These results do not reach statistical significance. The greatest difference in the major between the two groups (10:2) appears in the natural sciences. We shall see later that when the SC group is compared with a group whose F scores have changed even more than the present LC group, the difference is statistically significant.

The findings that the humanities and social sciences are more frequently the major in the SC group is surprising indeed. These courses are widely believed to be the more liberalizing components of most universities. We shall return to this issue at a later point.

CHANGE AND THE NATURE OF AUTHORITARIANISM

Earlier we indicated that despite the very considerable research on authoritarianism since the original California studies of Adorno, Frenkel-Brunswik, Levinson and Sanford, little attention has been directed to the nature of authoritarianism and its development. Nor has the typology or the dimensions of authoritarianism suggested by the original authors been the subject of adequate study.

On the developmental side, Sanford postulates that the freshman is in an authoritarian position. At least more freshmen, or freshmen more than seniors, manifest dogmatism, rigidity, and intolerance of ambiguity in their values and beliefs, especially in their reactions to differing and to their uncongenial groups or views. Essentially then, freshmen, or youth of that age, may be manifesting a type of cognitive control that can be expected to decline with increased maturity. Such an authoritarianism would thus be developmental, phase-specific, and typically mutable. Loevinger (21) has similarly postulated a conformist stage of ego development. This form of authoritarianism can be expected to decline with increasing maturity quite apart from collegiate experiences as such. Plant's findings, in fact, could be cited as evidence for precisely such a developmental process.

The LC group might conceivably be constituted of freshmen who manifest a developmental type of authoritarianism in contrast to the SC group who might be more characterologically authoritarians, or individuals who have not by the end of their senior year yet developed beyond the "adolescent" authoritarianism, or the conformist stage.

Several analyses were undertaken to find evidence for such speculations. OPI items were classified independently by two judges according to the "syndromes" of authoritarianism originally postulated by the California investigators. Items about which the two judges agreed initially, or about which they could agree after a conference, constituted new rational subscales of authoritarianism. The classification was also guided by the item inter-correlations available from a cluster analysis of part of the OPI. The new subscales had the advantage of being less ideological in manifest content than the F scales items, and more importantly, there were now available considerably more items for each subscale, essential for statistical comparisons.

Ten subscales with varying numbers of items were developed. Since they are rational scales, no claim can be made for the homogeneity of these subscales without empirical studies. The full subscales are to be found in the appendix. Several items are included under each subscale at this point for illustrative purpose, along with the total numbers in each.

Conventionalism (17)

(+) Nothing in life is worth the sacrifice of losing contact with your family.

(+) Every person ought to be a booster for his home town.

Authoritarian Submission (21)

(-) Disobedience to the government is sometimes justified.

(+) In the final analysis, parents generally turn out to be right about things.

Distrust and Cynicism (15)

(+) The best way to handle people is to tell them what they want to hear.

(+) I commonly wonder what hidden reason a person has for doing something nice for me.

Power and Toughness (12)

(+) A strong person doesn't show his emotions and feelings.

(+) I have at times had to be rough with people who were rude or annoying.

Punitive Moralism (23)

(+) It is best to avoid friendships with people whose ideas make them unpopular.

(-) It is all right to get around the law if you don't actually break it.

Punitive Sexual Moralism (14)

(-) I like to flirt.

(+) A large number of people are guilty of bad sexual conduct.

Dogmatism (14)

(+) Communism is the most hateful thing in the world today.

(-) I enjoy discarding the old and accepting the new.

Anti-Intellectualism (21)

(-) I enjoy reading essays on serious or philosophical problems.

(+) Science has its place, but there are many important things that can never possibly be understood by the human mind.

Anti-Ambiguity (17)

(+) I don't like things to be uncertain and unpredictable.

(-) I would rather be a brilliant but unstable worker than a steady dependent one.

Religious Fundamentalism (7)

(+) God hears our prayers.

(-) The prophets of the Old Testament predicted the events that are happening today.

While the LC group had invariably lower scores even as freshmen than the SC group on all of these subscales, none of the differences turned out to be statistically significant. Both groups were substantially higher than the Stanford means on all subscales. Data on these items are presented later in Table XI. Thus, again we could find no measures or indices which would differentiate LC and SC as freshmen.

Still another effort - in vain as it turned out - was a comparison of the two groups in the recently reported factors in the F scale by Kerlinger and Rokeach (22). In a study designed to study the relationships between measures of Dogmatism and Authoritarianism, these investigators found five factors in the F scale.

Table IX presents the means and sigmas for the two groups. (The factor numbers are those designated by Kerlinger and Rokeach.)

Table IX

Mean Total Freshmen Scores and Sigmas
Item Means for LC (N=43) and SC (N=23)
Groups on Kerlinger-Rokeach F Scale Factors

	LC		SC	
	Item Means	Means & Sigmas	Item Means	Means & Sigmas
Factor I: Virtuous Self Denial	(5.9)	17.6 (3.0)	(5.6)	16.9 (3.6)
Factor III: Authoritarian Aggression	(4.4)	17.3 (4.4)	(4.2)	16.8 (5.0)
Factor IV: Submission to Ingroup Authority	(5.2)	15.6 (2.6)	(5.4)	16.3 (3.0)
Factor V: Projectivity and Superstition	(3.6)	10.9 (3.7)	(3.4)	10.1 (4.2)
Factor VIII: Impulse Control	(5.7)	17.0 (2.8)	(5.9)	17.8 (2.2)

None of these differences reached statistical significance. It may be of interest to note that for both groups Authoritarian

Aggression and Projectivity and Superstition are lower than scores on the other scales. This is in agreement with the general findings of middle class authoritarianism. Their authoritarianism is more gentlemanly; it assumes the more submissive form, involving over-control, denial and repression, the masochistic aspect of authoritarianism. The more aggressive, sadistic and manifestly primitive - the ungentlemanly variety - is more characteristic of the less well-educated, so-called lower classes.

CONSEQUENCES OF CHANGE

Yet another way of gaining understanding of authoritarianism is to analyze what other difference can be observed in students who manifest varying amounts of change. The obtained differences should suggest at least consequences of change. We turn once more to the various scales, to see if the senior scores will reveal differences between the LC and SC groups. Comparisons of change can now be made within, as well as between, the two groups - that is to say the freshmen-senior changes for each group as well as differences between the groups as freshmen and again as seniors.

A. Senior Retest Personality - Value Measures

Table X presents the results of the various OPI scales as well as F and E.

The LC group changes substantially on most of the scales in addition to F. (This comes as no surprise in view of the substantial correlations between F and other OPI scales, particularly SM and DS.) On only two scales are there no significant differences: Impulse Expression and Estheticism. While the senior means do not quite approach those of the total Stanford or Berkeley samples on such scales as SM, DS, Es, IE (overall senior means are approximately 57, 58, 52, 52 respectively), the amounts of change on these scales given the freshmen levels of the LC group are somewhat greater than for the average.

The SC group also shows change on most of the same scales, but to a lesser degree than the LC group. Even their F and E scale scores are significantly different although the amount of change is far less than for the LC group.

A comparison of the senior scores of LC and SC, however, sheds little further light on what accounts for their differences. As was the case for the freshman results, the SM scale differentiates them, and even to a greater degree as seniors. In addition, they differ now on the DS scale. But both of these scales, as was previously noted, correlate fairly highly with F. One difference, namely Estheticism, is no longer significant apparently because the SC group changes relatively more on this scale than does the LC group.

Table X: OPI, F,E Freshmen-Senior Means, Sigmas, r's and t's for LC, SC Groups

	LC Group (N=44)				SC Group (N=23)				t
	Freshmen Means & Sigmas	Seniors Means & SD's	r	t^a (Freshmen-Senior)	Freshmen Means & Sigmas	Seniors Means & Sigmas	r	t^a (Freshmen-Senior)	LC vs SC (Senior)
Social Maturity	42.0 (8.8)	53.4 (9.1)	.58	9.19^3	37.7 (7.5)	45.2 (8.0)	.56	4.93^3	3.66^3
Impulse Expression	47.6 (10.4)	49.0 (11.5)	.59	n.s.	46.7 (10.1)	48.5 (11.6)	.78	n.s.	n.s.
Schizoid Functioning	51.4 (9.7)	45.9 (10.0)	.66	4.55^3	54.2 (10.1)	49.4 (11.2)	.66	2.96^2	n.s.
Masculinity-Femininity	52.1 (9.4)	48.3 (10.2)	.57	2.77^2	51.9 (10.6)	49.0 (12.9)	.74	n.s.	n.s.
Estheticism	47.8 (8.1)	49.1 (8.9)	.59	n.s.	42.8 (7.8)	45.7 (9.0)	.62	n.s.	n.s.
Developmental Status	43.0 (9.1)	52.6 (10.5)	.65	7.67^3	41.7 (8.5)	47.3 (10.0)	.73	3.86^3	1.99^1
F	149.1 (10.9)	104.5 (16.8)	.25	9.63^3	146.3 (5.9)	133.7 (10.8)	.26	5.56^3	7.54^3
E	71.6 (16.8)	45.8 (13.2)	.31	8.26^3	77.0 (17.1)	62.8 (12.3)	.64	5.18^3	5.13^3

$^a t$ for correlated means

$^1 p = .05$; $^2 p = .01$; $^3 p = .001$

As a methodological aside, these findings emphasize all too clearly that responses on highly correlated scales can provide little additional information of the kind we seek.

B. Changes in the Dimensions of Authoritarianism.

We return to the subscales of the OPI developed to isolate some of the dimensions of authoritarianism. It will be recalled that these did not differentiate the LC and SC groups as freshmen. The question now is whether when F scores change substantially, does this reflect fairly uniform change in various authoritarian dimensions or are there aspects of authoritarianism that are more or less invariant. Such information may provide leads about the structure of authoritarianism and about such issues as developmental versus enduring characterologically-linked components.

Turning first to the LC group in Table XI, it is clear that when substantial change in authoritarianism occurs, it is fairly general, extending over all of the dimensions of authoritarianism represented in our subscales. This finding could imply that these dimensions as measured are so highly intercorrelated that changes in any one are inextricably associated with changes in all others. As will be shown below, however, this does not obtain for the SC group which manifests change along some dimensions but not others.

An alternative is to assume that some components are developmental, others more permanent or characterological. Students who undergo genuine and substantial change in their authoritarianism, however, will change in both the developmental and characterological aspects of authoritarianism. This line of reasoning may be more pertinent in accounting for the results in the SC group.

The SC group also changes significantly, but only in some of the dimensions: Authoritarian Submission, Power and Toughness, Primitive Moralism, and Punitive Sexual Moralism. It is not an unreasonable assumption that changes in these components of authoritarianism are quite likely consequences of other developmental changes. In achieving greater independence and autonomy from parents and parental surrogates even the authoritarian adolescent can be expected to become less submissive. Similarly, with greater maturity, the grosser aspects of authoritarianism - the muscular variety - becomes modulated so that Power and Toughness also declines. Perhaps a somewhat more mature sexual identity reduces the need for cruel or sadistic tendencies, presumably remnants of the assertive (phallic) little boy. The decline in punitive moralism is a commonly reported phenomenon of the college years - a frequently lowered judgmental attitude towards the sexual behavior or deviant behavior of others. Thus, it would appear that even the SC group has undergone significant change in some aspects of Super-Ego functioning in the direction of a somewhat less harsh Super-Ego and somewhat more impulse freedom.

Equally significant, however, are the authoritarian dimensions along which the SC group manifests little or no change. Let us assume

Table XI: OPI Authoritarian Subscales: Freshman-Senior Raw Score, Means, Sigmas, r's, t's, for LC, SC Groups.

		LC (N=41)				SC (N=22)				
	(Total no. of items)	Freshmen Means & Sigmas	Senior Means & Sigmas	r's	t (Freshmen-Senior)	Freshmen Means & Sigmas	Senior Means & Sigmas	r's	t (Freshmen-Senior)	t (LC vs SC Senior)
Conventionalism	(17)	9.4 (2.6)	7.3 (3.2)	.48	4.66^3	10.3 (2.5)	9.5 (2.3)	.48	n.s.	2.85^2
Authoritarian Submission	(21)	12.4 (3.2)	10.0 (3.4)	.52	4.82^3	13.3 (3.4)	12.1 (3.1)	.58	3.44^2	2.47^2
Distrust and Cynicism	(15)	7.2 (2.7)	5.8 (2.8)	.48	3.41^2	8.1 (2.9)	6.9 (3.7)	.60	n.s.	n.s.
Power and Toughness	(12)	7.3 (2.3)	4.8 (1.9)	.39	6.80^3	7.7 (2.5)	6.6 (2.6)	.78	3.20^2	3.11^2
Punitive Moralism	(23)	11.6 (3.9)	7.5 (3.2)	.59	8.22^3	11.8 (3.6)	8.8 (3.1)	.32	3.50^3	n.s.
Punitive Sexual Moralism	(14)	7.0 (2.4)	4.5 (2.9)	.45	4.60^3	7.1 (2.6)	4.9 (3.0)	.62	4.18^3	n.s.
Dogmatism	(14)	6.7 (2.4)	4.2 (1.8)	.25	6.00^3	6.7 (1.8)	5.3 (2.4)	.36	n.s.	n.s.
Anti-intellectualism	(21)	9.1 (3.4)	7.8 (3.5)	.63	2.40^1	10.7 (2.9)	9.2 (4.2)	.47	n.s.	n.s.

(Cont'd on next page)

Table XI: OPI Authoritarian Subscales: Freshman-Senior Raw Score, Means, Sigmas, r's, t's, for LC, SC Groups (Cont.)

		LC (N=41)				SC (N=22)				
	(Total no. of items)	Freshmen Means & Sigmas	Senior Means & Sigmas	r's	t (Freshmen-Senior)	Freshmen Means & Sigmas	Senior Means & Sigmas	r's	t (Freshmen-Senior)	t (LC vs SC Senior)
Anti-Ambiguity	(17)	10.0 (2.3)	7.5 (2.8)	.41	5.70[3]	10.1 (2.4)	9.3 (2.8)	.57	n.s.	2.38[2]
Religious Fundamentalism	(7)	4.8 (1.9)	3.4 (2.5)	.63	4.70[3]	4.3 (2.0)	3.5 (1.9)	.64	n.s.	n.s.

[1] p = .02

[2] p = .01

[3] p = .001

that we can classify the subscales under two categories: Cognition and Impulse, recognizing that such an ad hoc classification may ignore considerably overlap.[6] Cognition might include both cognitive content - that is particular beliefs and attitudes - as well as cognitive controls and styles. The Impulse category refers to a greater extent to beliefs and attitudes about behavior more directly linked to impulses and drives - sex, aggression, dependency, and the like - and their control. (An alternate possibility is to consider the cognitive, largely ego processes, and the impulse, largely superego.)

Cognition (Ego)	Impulse (Superego)
Conventionalism	Authoritarian Submission
Distrust and Cynicism	Power and Toughness
Dogmatism	Punitive Moralism
Anti-Intellectualism	Punitive Sexual Moralism
Anti-Ambiguity	
Religious Fundamentalism	

It is precisely in the Impulse category that even the SC group manifests change. Or put another way, and perhaps more significantly, it is in the Cognition category that they show relatively little change.

What this suggests is to us unexpected and theoretically challenging. Those very dimensions - the cognitive - which might be expected to change more readily as a result of college education are precisely the dimensions of authoritarianism that appear to change least in students whose F scores remain elevated. On the other hand, these dimensions of authoritarianism which might be presumed to be more closely linked to impulses are the dimensions of authoritarianism that appear even in this group to change more. That is to say, Authoritarian Aggression and Submission, Power and Toughness, dimensions which might on theoretical grounds be assumed to be more centrally linked to the basic drive structures of the individual and thus more resistant to change are precisely the ones that show more change in all of our authoritarian subjects.

If we view these findings developmentally they may be less paradoxical. Late adolescence is that phase of the life cycle during which many impulses and defenses are reorganized. The achievement of greater autonomy, a clearer ego identity, more integration and control of the sexual and other impulses, are major developmental tasks achieved in varying degrees during this period. Our data suggest that even students who remain relatively high in authoritarianism progress in these directions, although somewhat less to be sure than others. What has been referred to as the external Superego can thus be said to become weaker during the college years even for those whose authoritarianism otherwise changes relatively little. But, their Ego functions, which include cognitive controls, change less in this group. This suggests, as shall be elaborated later, a greater emphasis upon the cognitive processes in authoritarianism, if not a cognitive theory of authoritarianism.

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[6] The reader can better judge the justification for this by referring to the appendix for the items in the various subscales.

When we compare the senior scores of the LC and SC groups, however, the results are less clear. We shall consider the question at a later point since different results were found when the SC group is compared with a new group whose seniors F scores do not overlap.

A "PURIFIED" CHANGE GROUP

The use of the criterion of a decrease of 25 or more (1 sigma) between freshmen-senior F scores resulted in some overlap in senior F scores between the LC and SC groups. This raised the questions of whether the results would differ if we were to compare more extreme groups of F changers whose senior F scores would not overlap.

Several discriminant analyses of the original LC and SC groups on the basis of the 10 new authoritarian subscales and the Kerlinger-Rokeach F factors showed in fact that the two groups were not significantly different. But the analyses also revealed that there were 17 subjects of the LC group who did not overlap with the SC group on the two sets of variables in the discriminant analyses. These 17 subjects were accordingly designated as a purified LC group - "PC"; the various comparisons previously made for the LC and SC group were repeated for the new PC and original SC group.

A. Major, Housing, and Aptitude.

With respect to majors, 7 of the 17 in the PC group for whom accurate data are available are majors in natural and biological science majors and mathematics in contrast to 2 of the 20 in the SC group ($x^2 = 4.87$, p .02). Thus the suggested (but not statistically significant) relationship between majoring in science and change in authoritarianism in the earlier analysis now turns out to be statistically significant.

What are we to make of this paradoxical finding? That the natural and biological sciences, rather than the humanities and social sciences, should be associated with greater change in authoritarianism is surprising.

One could readily postulate that the very essence of science is non-authoritarian, at least in its pure and ideal form. Students encountering the critical, analytic thinking in the sciences, the need for empirical testing and evidence cannot long cling to reliance on authority, conventionalism, and dogmatism. Given some stereotypes of the narrowness of scientists, that such shifts should generalize beyond the subject matter of the science is both surprising and heartening. An important implication is that changes in cognitive orientation can lead to quite fundamental reorganization of fairly central personality traits such as authoritarian syndromes. This view is what Sanford postulates for the potential impact of higher education upon personality and such a possibility is quite in keeping with the contemporary emphasis on ego psychology in psychoanalytic theory.

There is also the possibility that the relatively greater structure in the natural and biological sciences, the presence of acknowledged authorities and experts, the greater certainty and precision could all combine to be more effective in inducing change than the more ambiguous, relativistic concepts and the less certain findings of the social sciences or viewpoints of the humanities. The presence of greater structure in the natural sciences would be more congruent with the cognitive styles of more authoritarian students. When such structured fields also include the values of science, the student can more readily question traditional beliefs and values. And what may be more significant, the questioning of authority and dogma may liberate his own critical and skeptical tendencies towards authority. This is especially the case when the prestige of science runs high. On the other hand, an authoritarian student exposed to the humanities might well find the relative absence of structure and the considerable ambiguity quite intolerable. Further, the very direct attack often found in the humanities against many conventional and traditional social views and values often bypassed in the sciences - immediately put him on guard; he reacts defensively and resorts to his authoritarian defenses to resist change.

Thus, we may have the paradoxical outcome that what might logically be presumed to liberate and humanize may for some even reinforce authoritarianism. Less directly threatening, less ambiguous, and more structured fields might have the effect of restructuring cognitive styles more effectively among authoritarians. A paper by Stern and Cope (9) seems to point in the same direction.

Another possible factor, not necessarily contradictory to a cognitive restructuring view, might emphasize a socialization assumption. If we assume that students majoring in various fields have somewhat different personality characteristics it is conceivable that natural science majors, on the whole, would tend to be initially less authoritarian. Those students with higher authoritarianism entering such membership groups would in time move towards the norms of the group. Such would surely be the prediction of sociologists who have studied student sub-cultures and professional socialization.

But what is the situation with regard to majors in humanities and social sciences? Are students in these sub-cultures more authoritarian than those in the natural sciences? There is reason to suspect that these majors are, in fact, more heterogeneous than majors in the natural science. Such fields as political science, economics, history, and even English often include many students whose career plans - and thus ultimate reference groups - are the conventional professions and business careers. In contrast to the natural sciences, then, one might predict that these majors include a greater diversity of students with respect to authoritarian characteristics. Students might affiliate with others in their major who share similar career plans and social personal characteristics and be more influenced by these reference groups than the membership group of the major.

Without career interests in the major discipline as such, it could be postulated that courses, teachers, and the overall perspectives of the major are likely to influence the student less. He can readily distance himself from those when the major is only preparatory to another career. His imagery - valid or otherwise - of the perspectives of his future career may be of greater influence than his college teachers or fellow students who have intrinsic commitment to the field of the major. Thus, the professor of political science or of economics, or the beliefs and values of the authorities in these fields, it can be postulated, will have greater influence on students who intend to become career economists or political scientists rather than lawyers or business executives.

Concerning housing arrangements, our data are quite incomplete. However, only 2 of 13 (15%) PC group lived in fraternities, in contrast to 8 out of 23 (35%) in the SC group. Similarly, somewhat more of the PC group lived off campus or at home. But larger samples would be required before these results are to be considered seriously.

The differences in academic aptitude and achievement are minor. The PC group - despite the greater number majoring in natural sciences - averages somewhat higher in the verbal SAT, and somewhat lower in the math SAT. But these differences are not statistically significant.

Table XII

SAT, GPA of PC, SC Groups

	PC	SC
SAT (V)	563	540
SAT (M)	602	627
GPA	2.79	2.75

Thus, whatever else may make for change or refractiveness to change, and to the extent that college board scores and grades are related to intellectual capacity, it is not likely that antecedents of change will be found in abilities among the kinds of students in our samples.

B. Related Personality Characteristics

Table XIII

OPI, F, E, Freshmen Means, Sigmas, t's for PC, SC Groups

	Means & Sigmas		
	PC (N=17)	SC (N=22)	t
Social Maturity	47.40 (9.01)	37.70 (7.50)	3.67[3]
Impulse Expression	48.30 (11.05)	46.70 (10.10)	n.s.
Schizoid Functioning	50.20 (9.03)	54.20 (10.10)	n.s.
Masculinity-Femininity	50.50 (10.05)	51.90 (10.50)	n.s.
Estheticism	50.30 (8.81)	42.80 (7.80)	2.81[2]
Developmental Status	48.20 (9.10)	41.70 (8.50)	2.30[1]
F	148.50 (5.90)	146.30 (5.90)	n.s.
E	72.90 (16.80)	77.00 (17.10)	n.s.

[1] p = .03
[2] p = .01
[3] p = .001

These results are, with one exception, the same as those found for the original LC and SC groups. SM and Estheticism continue to differentiate the two groups even as freshmen. The new PC groups, however, also differs significantly on the DS scale.

As described in the Research Manual of the Omnibus Personality Inventory (17), DS "differentiates between older and younger college students. High scorers are more like seniors in their attitudes and thinking; they express more rebelliousness toward authority, especially when it is institutionalized in family, school, church, or state. They are less authoritarian than the low scorers and, at the same time, freer to express impulses. DS correlated .78 with an autonomy scale, which presumably measures non-authoritarian thinking and a need for independence."

The PC group may be more like the average Berkeley and Stanford freshman with respect to autonomy and independence despite their relatively high F scale scores. What are we to make of this seeming paradox? Our data permit no conclusive answer. Conceivably, their high F scores reflect the conventional beliefs of their family and social background. But this authoritarianism may be discrepant with their own more autonomous and intellectual-esthetic disposition. With increasing autonomy and cognitive development in lesser authoritarian atmospheres, their authoritarianism is reduced.

Table XIV

OPI Authoritarian Subscales, PC, SC Groups: Freshmen Means, Sigmas, t's

	Means & Sigmas PC (N=17)	SC (N=22)	t
Conventionality	8.60 (3.30)	10.30 (2.50)	n.s.
Authoritarian Submission	11.30 (3.10)	13.30 (3.40)	n.s.
Distrust and Cynicism	7.10 (2.80)	8.10 (2.90)	n.s.
Power and Toughness	6.40 (2.50)	7.70 (2.50)	n.s.
Punitive Moralism	9.20 (3.40)	11.80 (3.60)	2.29[1]
Punitive Sexual Moralism	6.30 (2.30)	7.10 (2.60)	n.s.
Dogmatism	5.80 (2.70)	6.70 (1.80)	n.s.
Anti-Intellectualism	8.40 (3.70)	10.70 (2.90)	2.18[1]
Anti-Ambiguity	8.70 (2.40)	10.10 (2.40)	n.s.
Religious Fundamentalism	4.30 (2.10)	4.30 (2.00)	n.s.

[1] p = .03

In the absence of such intellectual and autonomous dispositions, however, the authoritarianism of the SC group, even while exposed to the same influence during the college years, changes significantly less.

The PC and SC groups do not differ in F or the Kerlinger-Rokeach Factor Scores as was the case in the original analysis. Apparently the F scale, even when analyzed by component factors such as those of Kerlinger and Rokeach, does not reveal differences in aspects of authoritarianism such that the more refractory and more mutable components can be isolated. The specially constructed authoritarian subscales of the OPI seem more promising. While these scales did not discriminate between the original LC and SC as freshmen, two of the subscales do so for the PC and SC groups. (Table XIV)

With the exception of Religious Fundamentalism, the scores of the SC group are consistently higher on all of the subscales. However, the differences are statistically significant on only two: Punitive Moralism and Anti-Intellectualism. The latter finding is consistent with the many other suggestions of greater intellectual disposition on the part of students whose authoritarianism changes substantially.

Punitive Moralism is a significant part of what has been called Authoritarian Aggression. Three of the four items in the F scale, heavily weighted by what Kerlinger and Rokeach label the Authoritarian Aggression Factor, deal with punitively moralistic reactions to sex criminals, homosexuals, or to the immoral, crooked or feebleminded. For whatever reasons, the PC group is lower initially on this component of authoritarianism as measured in our new subscale. This is consistent with their higher scores on Developmental Status which are also associated with less punitive moralism towards others, even those whose beliefs and behavior differ substantially. But there is in our data no explanation of why the PC group should initially be lower on Punitive Moralism. All that can be said is that scores on this dimension are correlated with amount of change in other components of authoritarianism during the college years.

Changes associated with decrease in F scores - or consequences of such decrease - may be revealed by a comparison of the senior subscales. We would expect these differences to be more pervasive than those found between the original LC and SC groups, which does in fact turn out to be the case. Table XV indicates that with the exception of two subscales (Punitive Sexual Moralism and Religious Fundamentalism) significant differences are found in the remaining subscales.

It will be recalled that the original LC group differed significantly from the SC on only four of the subscales: Conventionalism, Authoritarian Submission, Power and Toughness, and Anti-Ambiguity. (Table XI) When the decrease in F is greater so that the student is near the mean of other seniors, they differ as well on Distrust and Cynicism, Punitive Moralism, Dogmatism, and

Anti-Intellectualism. Thus, with greater change in F scores there results more pervasive change in the various dimensions of authoritarianism.

Table XV

Senior Authoritarian Subscales PC, SC: Means, Sigmas, t's

	Means & Sigmas		
	PC (N=17)	SC (N=22)	t's
Conventionalism	4.90 (3.10)	9.50 (2.30)	5.32[3]
Authoritarian Submission	8.20 (3.10)	12.10 (3.10)	3.90[3]
Distruct and Cynicism	4.70 (2.30)	6.90 (3.70)	2.15[1]
Power and Toughness	3.50 (1.30)	6.60 (2.60)	4.49[3]
Punitive Moralism	5.90 (3.20)	8.80 (3.10)	2.86[2]
Punitive Sexual Moralism	3.70 (2.40)	4.90 (3.00)	n.s.
Dogmatism	3.20 (1.40)	5.30 (2.40)	3.21[2]
Anti-Intellectualism	6.40 (3.10)	9.20 (4.20)	2.30[1]
Anti-Ambiguity	5.70 (2.00)	9.30 (2.80)	4.48[3]
Religious Fundamentalism	2.50 (2.30)	3.50 (1.90)	n.s.

[1] p = .05
[2] p = .01
[3] p = .001

C. Educational Orientation and Values

With respect to orientation to courses, getting good grades is indicated as the major objective by 62% of the SC group in contrast to 18% of the PC group. For 53% of the latter usefulness for career is the most significant objective compared with 14% of the SC group. (A similar difference was also found in the original LC-SC comparison.)

The general orientation to college of the SC group seems less sophisticated, more "high schoolish". A greater social partying orientation is revealed by 61% of the SC group who check social activities and parties as frequent activities in contrast to 18% of the PC group. Similarly, 61% of the SC group check frequently engaging in sports as spectators and 48% as participants while 29% and 24% respectively of the PC group gives these responses.

When asked to rank order some fourteen interests and activities for the relative degree of importance they expect them to have in their future lives, the PC and SC groups show some noteworthy differences along with striking similarities.

The top four mean rankings for the two groups are:

PC	SC
1. Career or occupation	1. Career or occupation
2. Future family	2. Future family
3. Intellectual or artistic activities	3. Love and affection
4. Love and affection; Helping others (tied)	4. Developing a personal identity

Equally interesting are the least valued activities which are presented in order of their mean rankings with the lowest ranked designated as 14.

PC	SC
11. Participation as a citizen in the affairs of your community	11. Participation in activities directed toward national or international betterment
12. Sports or athletics	12. Intellectual and artistic activities
13. Religious beliefs and activities	13. Participation as a citizen in affairs of your community
14. Home improvement	14. Home improvement

Again the greater intellectual disposition of the PC group is apparent; they rank such activity as third while the SC group ranks it in twelth place. The PC group rejects sports and religious activities which are rated considerably higher by the SC group.

Like most other students, both groups, nevertheless, exemplify the privatistic orientation emphasized by Jacobs and Riesman as characteristic of many in contemporary America. (If the facts were known this might be equally true elsewhere and through much of history.) At any rate, it is the self and family - career, love and affection - that are expected to be central in one's life; community, national, or international affairs are not expected to occupy much time or energy. Our PC group, however, does express some interest in helping others, presumably on an individual basis, or perhaps through their careers.

SUMMARY AND IMPLICATIONS

Approximately two thirds of male freshmen with relatively high F scores of at least 139 (32 items mean of 4.35) show a decline of at least 25 (one sigma) over the four years at the University of California and Stanford, while one third show less or no decline. These subjects were classified respectively as large (LC) and small changers (SC). In an effort to isolate correlates of change the two groups were compared for aspects of (1) background, (2) academic aptitude, (3) academic and social experiences, and (4) personality-attitudinal variables.

A. Congruence Hypothesis

A significant difference between the two groups exists with respect to their initial intellectual-esthetic disposition. The LC group is initially higher in their interest in art and ideas while the SC group manifests lesser interests in these areas. Several other results point to the SC being characteristically less intellectual, with patterns of interest and values more typical of a conventional middle-class life style built around a satisfying job and family, in which social life and sports will play prominent roles. While the LC group shares some of these "privatistic" values, as seniors they express more intellectual and humanistic values and interests. This turns out to be more definitely the case for a "purified" C group. There is a suggestion that the family background may account for some of these differences in that students whose fathers have business careers - managerial or entrepreneurial - are more likely to be in the SC group than the LC group.

Academic aptitude test scores and grades do not differentiate them suggesting that at this ability level scholastic aptitude is not a determinant. But there is a difference in regard to orientation to the academic life: The SC group approaches courses with an orientation of getting grades while the LC group is more concerned about usefulness of courses to their careers. Paradoxically, relatively high F scorers who major in our samples in the natural or biological sciences, rather than as might be expected in the social sciences or humanities, are apt to change more.

Both of these findings - the greater amount of change among students with initially higher intellectual-esthetic disposition as well as the greater amount of change in the majors in natural sciences - each in its own way, points to the plausibility of a Congruence Hypothesis. Students with initially higher intellectual disposition are more likely to be receptive to influence from intellectual-esthetic sources because they value these more initially. By contrast, the less intellectual student might avoid or resist such influence because of initially low valuation of intellectual activity. Thus, the impact of college on different students varies with the congruence or fit between the student's initial values and perspectives, and those valued by various components of the college culture.

Another aspect of congruence is reflected in the finding concerning science majors. Here we assume that congruence with respect to cognitive style rather than content is operative. Relatively high authoritarian students may prefer clear-cut structure, order, precision to ambiguity, vagueness, and relativism. Their cognitive style is accordingly more congruent with the structure and style in the natural sciences rather than the humanities or most of the social sciences. When they find congruent styles in the curriculum, they are more susceptible to the influence of the content and values of those courses.

Assuming the validity of this formulation, a number of significant educational implications follow.

Some form of challenge is commonly assumed to be an effective mode of educating and inducing change in students. But challenges which go too sharply against the cognitive grain of students may be precisely the techniques to be avoided. In the instance of authoritarian students well organized, structured, content and course style may be more effective in inducing change than the more general, less concrete and more ambiguous which they are apt to resist and reject mightily. So long as their authoritarianism persists, the liberalization and humanization of such students may more likely occur within more, rather than less, structured college environments, disciplines, and instructional approaches.

It follows that there can not be one ideal curriculum or extra-curriculum for all students. While such a truism would surely gain immediate and widespread assent there is little evidence that the differing characteristics of students which call for diverse educational approaches is given sufficient consideration in higher education. In fact, we hardly have sufficient knowledge at present to provide a basis for differentiated higher education. Our findings and the Congruence Hypothesis represent one example which suggest the need for further study and experimental educational efforts. Authoritarian (and otherwise anti-intellectual) students present a very considerable educational challenge; their education and development may require forms of education distinctly different from those effective with other students.

An alternative, but not necessarily competing, hypothesis to the Congruence Hypothesis would stress the effects of social psychological variables. Science majors may, on the whole, be initially and more consistently less authoritarian in the two institutions studied. As a consequence, peer group enculturation could predictably lead to decline in authoritarian scores. While majors in the humanities and social sciences may be generally lower in authoritarianism, some fields, political science and economics in particular, include students who are more diverse with respect to authoritarianism. What may be more critical than the major are the career reference groups of students in various majors. For some in the social sciences and humanities these are more likely to be, for example, business careers than would be the case for science majors who are more apt to pursue professional and academic careers in the various sciences. The argument would assert that these reference groups become differentiated during the undergraduate days leading to distinct peer subcultures, with resulting enculturation to the appropriate reference group rather than to the major. Where a student is going (what is now being referred to as anticipatory socialization) may for some aspects of development and education be more decisive than where he has been, what his background is. Or, put another way, reference groups may through certain developmental phases be more significant than membership groups.

B. Cognition and Impulse in Authoritarianism.

A new set of authoritarian subscales utilizing items of the Omnibus Personality Inventory was developed to provide for a differentiated analysis of authoritarianism. The results of retesting with these subscales during the senior year indicate that the LC and SC groups both change in some components of authoritarianism. While subjects of the LC group manifest changes which extend over all of the subscales, the SC group changes only in those subscales that appear more directly linked with impulses and superego (Authoritarian Submission, Power and Toughness, and Punitive Moralism) rather than more purely cognitive styles and beliefs (Conventionalism, Distrust and Cynicism, Dogmatism, Anti-Intellectualism, Anti-Ambiguity, and Religious Fundamentalism). These might be considered more general ego functions.

These findings suggest that during college-age years components of authoritarianism more directly related to impulses, drives, and superego may change even when some aspects of ego functioning - cognitive structures and beliefs - remain unchanged. At the same time, these results suggest that when there are fewer changes in ego functions, especially with respect to cognitive styles and beliefs, there is less change in authoritarianism as measured by the F scale.

A developmental model of authoritarianism or conformity such as suggested by Sanford and Loevinger would accordingly need to differentiate authoritarianism or conformity in terms of cognitive and non-cognitive components (or ego, impulse, and superego).

Since at least in the instance of some relatively high authoritarians change in the non-cognitive components are not necessarily accompanied by changes in the cognitive, the results suggest that cognitive styles or controls may be more refractory to change than superego and impulse during the college years. If so, persistent authoritarianism during late adolescence and young adult years may need to be conceptualized primarily in terms of cognitive structures rather than characterological structures that emphasize impulses and superego. These findings and their conceptualization, if valid, would lend support to ego psychoanalytic views which stress the ego and cognitive controls in personality.

The findings are more definite for a "purified" change group. This new group - "PC" - included subjects whose F scores as seniors were close to the means of all seniors in the retest sample at the University of California and Stanford. The results are in close agreement with those reported for the original LC-SC groups except that now some suggested differences are statistically significant, the most interesting being the difference between science and non-science majors.

Consideration of a number of findings taken together - the role of intellectual-esthetic disposition, the absence of cognitive-linked changes among those who change less, the effect of majoring in a science - leads us to suspect cognitive restructuring as a critical factor underlying change in generalized authoritarianism during the college years. Developmental changes in impulse or superego systems alone do not, in the samples studied, result in as much change in F scale authoritarianism. Whether cognitive restructuring alone in the absence of other developmental changes in impulse and drive control would result in such change is an open question, unanswerable by the data at hand.

Because of their theoretical and educational implications, these findings merit further detailed study in research specifically designed for this purpose.

APPENDIX

OPI AUTHORITARIAN SUBSCALES (Experimental Form I)

Conventionalism

(+) Nothing in life is worth the sacrifice of losing contact with your family.

(+) I would be uncomfortable in anything other than fairly conventional dress.

(-) At times I have a strong urge to do something harmful or shocking.

(+) Every wage earner should be required to save a certain part of his income each month so that he will be able to support himself and his family in later years.

(+) It is a pretty callous person who does not feel love and gratitude toward his parents.

(-) Many of my friends would probably be considered unconventional by other people.

(+) My conversations with friends usually deal with such subjects as mutual acquaintances and social activities.

(-) It is not the duty of a citizen to support his country right or wrong.

(-) The findings of science may some day show that many of our most cherished beliefs are wrong.

(-) Some of my friends think that my ideas are impractical, if not a bit wild.

(+) A person should adapt his ideas and his behavior to the group he happens to be with at the time.

(+) The most important qualities of a husband are determination and ambition.

(+) I do not like to see people carelessly dressed.

(+) Families owe it to the city to keep their sidewalks cleared in the winter and their lawns mowed in the summer.

(-) Every person ought to be a booster for his own home town.

(-) There is nothing wrong with the idea of intermarriage between different races.

(+) If you start trying to change things very much, you usually make them worse.

Authoritarian Submission

(-) I have often either broken rules (school, club, etc.) or inwardly rebelled against them.

(-) Politically I am probably something of a radical.

(-) If it weren't for the rebellious ideas of youth, there would be less progress in the world.

(-) At times I have very much wanted to leave home.

(+) Every person should have complete faith in a supernatural power whose decisions he obeys without question.

(-) As a youngster in school I used to give the teachers lots of trouble.

(-) Unquestioning obedience is not a virtue.

(+) One of my aims in life is to accomplish something that would make my mother proud of me.

(-) One of the most important things children should learn is when to disobey authorities.

(+) I have been inspired to a way of life based on duty which I have carefully followed.

(-) During one period when I was a youngster, I engaged in petty thievery.

(+) My home life was always happy.

(-) I have sometimes wanted to run away from home.

(+) In the final analysis, parents generally turn out to be right about things.

(-) I have often gone against my parents' wishes.

(-) In school I was sometimes sent to the principal for cutting up.

(-) Disobedience to the government is sometimes justified.

(+) Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

(+) We should respect the work of our forefathers and not think that we know better than they did.

(+) People ought to be satisfied with what they have.

(+) Our modern industrial and scientific developments are signs of a greater degree of civilization than that attained by any previous society; for example, by the Greeks.

Distrust and Cynicism

(+) The best way to handle people is to tell them what they want to hear.

(+) Human nature being what it is, there will always be war and conflict.

(+) It is better never to expect too much; in that way you are rarely disappointed.

(+) A wise person thinks of life as a game; he is both in and out of the game and watching and wondering at it.

(+) People pretend to care more about one another than they really do.

(+) I would rather remain free from commitments to others than to risk serious disappointment or failure later.

(+) Teachers often expect too much work from students.

(+) Most people inwardly dislike putting themselves out to help other people.

(+) I think nearly anyone would tell a lie to keep out of trouble.

(-) I believe I can influence my congressmen if I want to.

(+) I commonly wonder what hidden reason another person may have for doing something nice for me.

(+) Often I think that life is absurd.

(+) I don't think much of most of the men I know.

(+) The past and the future are meaningless; there is no choice but to live in the present.

(+) Almost nothing a person says about himself reveals very much about what he is really like.

Power and Toughness

(+) People who seem unsure and uncertain about things make me feel uncomfortable.

(+) I easily become impatient with people.

(-) I tend to make friends with me who are rather sensitive and artistic.

(+) A strong person doesn't show his emotions and feelings.

(+) More than anything else, it is good hard work that makes life worthwhile.

(+) Kindness and generosity are the most important qualities for a wife to have.

(+) A strong person will be able to make up his mind even on the most difficult questions.

(+) What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

(+) I do not blame a person for taking advantage of someone who leaves himself open to it.

(+) No weakness or difficulty can hold us back if we have enough will power.

(+) A person who lets himself get tricked has no one but himself to blame.

(+) I have at times had to be rough with people who were rude or annoying.

Punitive Moralism

(-) Society puts too much restraint on the individual.

(+) The trouble with many people is that they don't take things seriously enough.

(+) It is best to avoid friendships with persons whose ideas make them unpopular.

(+) I prefer people who are never profane.

(+) There must be something wrong with a person who is lacking in religious feeling.

(+) I believe we are made better by the trials and hardships of life.

(+) Nowadays more and more people are prying into matters that should remain personal and private.

(+) Most of our social problems could be solved if we could somehow get rid of the immoral, crooked, and feeble-minded people.

(+) Trends toward abstractionism and the distortion of reality have corrupted much art of recent years.

(-) It is all right to get around the law if you don't actually break it.

(+) The surest way to a peaceful world is to improve people's morals.

(+) Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped or worse.

(-) Many of my friends would probably be considered unconventional by other people.

(+) I am in favor of strict enforcement of all laws, no matter what the consequences.

(+) I am embarrassed by dirty stories.

(-) If I could get into a movie without paying and be sure I was not seen, I would probably do it.

(+) I have never done any heavy drinking.

(+) No normal, decent person would ever think of hurting a close friend or relative.

(-) Divorce is often justified.

(-) Each person should interpret the Bible for himself.

(-) It doesn't matter to me what church a man belongs to, or whether or not he belongs to a church at all.

(+) Political authority really comes not from us, but from some higher power.

(+) One needs to be wary of those persons who claim not to believe in God.

Puritanical Sex

(-) I like to hear risque stories.

(-) I like to flirt.

(+) No man of character would ask his fiancee to have sexual intercourse with him before marriage.

(+) A large number of people are guilty of bad sexual conduct.

(-) In spite of what you read about in wild sex life of people in important places, the real story is about the same as for any group of people.

(-) I believe women ought to have as much sexual freedom as men.

(+) I would disapprove of anyone's drinking to the point of intoxication at a party.

(-) I like to talk about sex.

(+) I dislike women who disregard the usual social or moral conventions.

(-) At times I have been so entertained by the cleverness of a crook that I have hoped he would get by with it.

(-) People would be happier if sex experience before marriage were taken for granted in both men and women.

(+) I wish I were not bothered by thoughts about sex.

(+) There usually seems to be some kind of barrier between me and the opposite sex.

(+) Very often I find that I dislike members of the opposite sex.

Dogmatism

(+) Communism is the most hateful thing in the world today.

(+) For most questions there is just one right answer, once a person is able to get all the facts.

(-) We cannot know for sure whether or not there is a God.

(-) It is a good rule to accept nothing as certain or proved.

(-) I enjoy discarding the old and accepting the new.

(+) It is annoying to listen to a lecturer who seems unable to make up his mind about what he really believes.

(+) A person who doesn't vote is not a good citizen.

(+) I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.

(+) Only a fool would try to change our American way of life.

(+) Nothing about communism is any good.

(+) Nothing about fascism is any good.

(-) I like to read about science.

(-) Institutionalized religion is not necessary for the maintenance of a relationship with God.

(+) When it comes to differences of opinion in religion, we should be careful not to compromise with those who believe differently than we do.

Anti-Intellectualism

(-) I enjoy reading essays on serious or philosophical subjects.

(-) I like to fool around with new ideas, even if they turn out later to have been a total waste of time.

(-) People ought to pay more attention to new ideas, even if they seem to go against the American way of life.

(+) The best theory is the one that has the best practical applications.

(-) The only meaning to existence is the one which man gives himself.

(-) The artist and professor are probably more important to society than the businessman and the manufacturer.

(-) As a youngster I acquired a strong interest in intellectual and aesthetic matters.

(-) I like to read criticisms of articles or books I have previously read.

(-) I like to discuss philosophical problems.

(-) I would like to enter a profession which requires much original thinking.

(-) I would like to collect prints of paintings which I personally enjoy.

(-) The unfinished and the imperfect often have greater appeal for me than the completed and the polished.

(-) I discuss the causes and possible solutions of social, economic, or international problems.

(-) I enjoy writing a critical discussion of a book or article.

(+) I prefer the practical man any time to the man of ideas.

(+) Science has its place, but there are many important things that can never possibly be understood by the human mind.

(-) I read at least ten books a year.

(+) To accomplish something, it is essential to concentrate on one thing, even to the extent of being narrow.

(-) I read a great deal even when it is not required in my work.

(+) There is too much emphasis in school on the intellectual and theoretical topics, not enough on practical matters.

(-) I like to look for faulty reasoning in an argument.

Anti-Ambiguity

(-) I find that a well-ordered mode of life with regular hours is not congenial to my temperament.

(-) I dislike following a set schedule.

(+) I much prefer friends who are pleasant to have around rather than those who are always involved in some difficult problem.

(-) Usually I prefer known ways of doing things rather than trying out new ways.

(+) I don't like things to be uncertain and unpredictable.

(+) It is essential for learning or effective work that our teachers and leaders outline in detail what is to be done and how to do it.

(+) Parents are much too easy on their children nowadays.

(+) Perfect balance is the essence of all good composition.

(+) I don't like to undertake any project unless I have a pretty good idea how it will turn out.

(-) In religious matters I believe I would have to be called a skeptic or an agnostic.

(-) I would rather be a brilliant but unstable worker than a steady and dependable one.

(+) I dislike test questions in which the information being tested is in a form different from that in which it was learned.

(+) I prefer to have a principle or theory explained to me rather than attempting to understand it on my own.

(-) I wouldn't like to live in the same place all my life.

(+) It's better to stick by what you have than to be trying new things you don't really know about.

(-) I have little or no idea what I will be like a few years from now.

Religious Fundamentalism

(+) I pray several times a week.

(+) God hears our prayers.

(+) I go to church or temple almost every week.

(+) The prophets of the Old Testament predicted the events that are happening today.

(+) I believe there is a God.

(+) I believe in a life hereafter.

(-) I have read little or none of the Bible.

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Chapter X

DRINKING AND PERSONALITY

Nevitt Sanford, Ph.D. and Susan Singer, Ph.D.

The "Personality Hypothesis"

The investigation to be reported here was directed to the hypothesis that there are observable ways of drinking or abstaining, and attitudes, beliefs, and values with respect to drinking that are characteristic of the individual and can be ascribed to persistent dispositions of his personality. If this hypothesis is true then we should expect changes in personality, as the individual goes through college, to be accompanied by changes in his alcohol-related behavior. It does not follow, however, that changes in alcohol-related behavior can be attributed to change in personality; this is quite possible, to be sure, but - as we shall see - such behavior is heavily influenced by social factors.

From a practical viewpoint our major hypothesis is not easy to demonstrate. Common sense and everyday observation tell us that drinking--on the part of non-problem drinkers--is heavily determined by the situation of the moment. In our culture, drinking is like going to the movies or playing cards, it is a very common form of everyday behavior which, in a given individual, may be observed to vary from one occasion or one setting to another, and when he is asked he will give different reasons for his behavior at different times and places. Little or nothing can be made of a single episode of drinking or abstaining, unless it is extraordinary in its social impact or known to be very unusual for the individual. There is little reason for even asking about the ways in which personality factors are involved until some consistency of behavior over time has been observed. But even this would not be strongly indicative of personality involvement for, as sociological studies have shown (see Verden, 1968[1]) consistency of alcohol-related behavior is often due to the persistence of the social situation in which the individual lives, chiefly his membership in social groups within which he conforms.

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[1] Verden, Paul. Alcohol in Contemporary American Society. In N. Sanford (Ed.) Alcohol Problems and Public Policy, New York: Oxford University Press, 1968. (In press)

Still, there are considerations that lend plausibility to our "personality hypothesis." For one thing, there are large individual differences. Whatever the drinking patterns of a group, even when the ways of its members seem at first glance quite homogeneous, it is always possible to discover various differences among them. When subjects are administered alcohol in situations where an all effort is made to control experimental sources of variation, the researcher often becomes painfully aware of the large individual differences that have nevertheless intervened to attenuate experimental effects. It seems reasonable to suppose that some of the differences in readiness for response that people bring to group drinking situations or to psychological experiments originate in relatively durable personality characteristics. Again, even people with alcoholism differ markedly in respect to when, where, what, and how they drink and in their behavior during or following their drinking (Levin, 1968[2]). There is no evidence that persons whose drinking patterns are not--or not yet--problem-induced or problem-causing are categorically different from those who have problems.

Finally, there is the argument from anthropoligical studies that in different cultures alcohol is used in radically different ways, and has radically different meanings and symbolic values; and that these phenomena can be understood as expressions of the shared needs, and the shared ways of meeting needs, of the people in that culture. An individual, no less than a culture, is capable of using alcohol in the service of his needs, however little or much these needs may be shared with other people; and he, no less than a culture, is capable of assigning meanings to alcohol, of using it to symbolize other objects or ideas, and of concocting fantasies and beliefs about it that accord with his way of looking at the world. Indeed, we may imagine that culture patterns, like contemporary fads and fashions, began to evolve in the brains of particular individuals who were trying to think of some way to make their lives more satisfying. Such patterns would be no less the creations of individual minds and hearts for having been produced by a number of different individuals in similar circumstances at about the same time. Once such patterns have proved their usefulness in a community and become integral parts of its structure and functioning they are, of course, adhered to by many individuals whose motives, e.g., a need to conform, may be quite different from those of the innovators. But those who had personality structures similar to those of the innovators--and they might be a majority--would presumably find similar meanings in drinking.

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[2] Levin, Max. The Nature of Problem-Drinking. In N. Sanford (Ed.) Alcohol Problems and Public Policy, New York: Oxford University Press, 1968. (In press)

The study of drinking behavior does not confront the student of personality with unique problems. That all observable behavior is in part determined by the situation of the moment, a situation that includes the individual's various group memberships, is a truism of personality theory. But it is also a truism that individuals manage to put their own stamp upon what they do, to express something of themselves in their behavior--enough so that an investigator, given a sufficiently broad sample of an individual's behavior, can make reasonably accurate inferences about his enduring characteristics.

This general way of proceeding has long been followed by literary men as they have sought to develop or to depict character, and to them we owe many notions about the place of alcohol-related behavior in the over-all functioning of the individual. Consider, for example, the following passage from Thomas Love Peacock's short novel _Nightmare Abbey_.

> _Mr. Glowry_ You are leaving England, Mr. Cypress. There is a delightful melancholy in saying farewell to an old acquaintance, when the chances are twenty to one against ever meeting again. A smiling bumper to sad parting, and let us all be unhappy together.
>
> _Mr. Cypress_ (filling a bumper) This is the only social habit that the disappointed spirit never unlearns.
>
> _The Reverend Mr. Larynx_ (filling) It is the only piece of academical learning that the finished educatee retains.
>
> _Mr. Flosky_ (filling) It is the only objective fact which the sceptic can realize.
>
> _Scythrop_ (filling) It is the only styptic for a bleeding heart.
>
> _The Honorable Mr. Listless_ (filling) It is the only trouble that is very well worth taking.
>
> _Mr. Asterias_ (filling) It is the only key of conversational truth.
>
> _Mr. Toobad_ (filling) It is the only antidote to the great wrath of the devil.
>
> _Mr. Hilary_ (filling) It is the only symbol of perfect life. The inscription "HIC NON BIBITUR"* will suit nothing but a tombstone.

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* No drinking here.

We have here an interesting collection of sentiments about drinking and a set of assumptions concerning why people drink. But the main point for us here is that Peacock uses this episode to develop, and to reveal, his character--or his caricatures.[3] What each man is made to say is characteristic of him. The fact that all these men belonged to the same culture, the same socio-economic class, the same clique, and were drinking the same beverage at the same party did not prevent them from expressing their personality differences through their alcohol-related behavior.

The Literature

The personality hypothesis seems not to have held much interest for psychologists. Most of what we know about non-problem drinking is owed to sociologists and anthropologists who, incidental to their studies of social and cultural determinants of drinking practices, have contributed observations on individuals. Some of these writers have gone so far as to delineate "types of drinkers" differentiated primarily on the basis of consistent motivational trends. Jellinek, in a major theoretical paper, (1945)[4] gave considerable attention to how individual patterns of drinking or abstaining might be expressive of different personality needs. But the great emphasis in all the studies reported is on the social situation and on factors in the drinker's social background. Instead of relating observed drinking behavior or inferred motives for drinking to dispositions or other attributes of personality, thereby increasing our understanding of the meaning of drinking to individuals, the authors focus on correlations between alcohol-related phenomena and a wide range of social factors, contemporary and historical.

In much psychological and social scientific work in recent years personality tends to fall, as it were, between two chairs. Either it is fragmented, as in those experimental studies that focus on two or three variables, or else it is lost in a surround of supra-individual social processes, as in social-psychological studies of drinking behavior. In this light it seems ironical that psychologists who are primarily interested in personality, and who have carried out intensive and comprehensive studies of personality, have neglected to inquire into their subjects' drinking behavior. For example, in the OSS assessment studies (Office of Strategic Service, 1948)[5] and in studies largely modelled after this work that were carried out at the Institute for Personality Assessment and Research at Berkeley, a "drinking party" was included among the procedures, but the interest was mainly in whether there were problem drinkers among the assessees--and in whether there was anything to the idea of in vino veritas. There was no systematic inquiry into the details of the subjects' drinking practices, into the phenomenology of their drinking, or into beliefs, attitudes, and values respecting alcohol-related phenomena. The same is true of other assessment studies.[6] One might say that even in a comprehensive, three-day assessment study the investigators cannot attend to everything. Probably a number of important areas of behavior were left out of account. Yet when one considers the enormously wide range of phenomena that were somehow covered, in questionnaires and in interviews, one is left with some suspicion that students of personality have participated in a "conspiracy of silence" about alcohol.

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[3] Peacock's novel, written in 1818, was intended to satirize the ideology and actions of his friends Shelley, Byron, Coleridge, and other members of their, and his, circle, and it was written with their entertainment in view. Scythrop is Shelley, Cypress is Byron, Flosky is Coleridge. Peacock was struck and amused by the capacity of this group to enjoy themselves while bemoaning the sad state of the world.

[4] Jellinek, E.M. The Problem of Alcohol. In Alcohol, Science and Society, New Haven: Quarterly Journal of Studies on Alcoholism 1945.

In order to add to our understanding of drinking in the context of personality an investigator must be interested both in personality and in non-problem drinking.[7] This is a rare combination of interests it seems; we have been able to find it in only two investigators. Emery (1960)[8] suggests that beverage preferences may reveal dispositions of personality. One hypothesis, which is presumed to hold in the absence of pathology, is "that preferences for sweetness in an alcoholic drink reflects a desire to seek an infantile kind of pleasure, and by implication, escape in that respect at least, from reality." Preference for bitterness in a drink reflects a greater willingness to face up to reality and to meet it on its own terms. When these opposite taste preferences are combined with other qualities of the drink, i.e., fullness, three types of drinkers are hypothecated: the indulgent, the social (impulsive, acting out), and the reparative. The last adjective describes a drinker who is steady, hard-working, reality-oriented and desirous of putting back or refilling by means of his alcoholic beverage at the end of the working day what he gives out in his duty relations (p. 25). The author concludes that "if the correspondence can be verified (between types of drinkers and their preferences in drink), the theory should offer a valuable means of exploring and predicting many other things about the drinkers of different drinks"(p.22).

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[5] Office of Strategic Services Assessment Staff. Assessment of Men. New York: Holt, Rinehart, Winston, 1948.

[6] One of the present authors has participated in this neglect of alcohol-related behavior. Sanford took part in the OSS studies, some of the studies at the Berkeley Institute, and in studies of college students and college alumnae. Nonpathological alcohol-related behavior simply did not have a significant place in the "life space" of this investigator or in that of his colleagues. There is further irony in the fact that at a recent conference on smoking in relation to personality this investigator was prevented from expressing indignation about the neglect just described because he had to confess that in studies of personality and drinking in which he had been involved, no one had thought to ask the subjects about their smoking.

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[7] There are, of course, many studies that have found differences in personality between problem-drinkers and other people; for example, Button, A.D. A Study of Alcoholics with the MMPI. Quarterly Journal of Studies on Alcohol, 1956, 17, 263-281; McCord, W. and McCord, Joan. Origins of Alcoholism, Stanford, California: Stanford University Press, 1960; Rosen, A.C. A Comparative Study of Alcoholics and Psychiatric Patients with the MMPI. Quarterly Journal of Studies on Alcohol, 1960, 21, 253-266; and Singer, E., Blane, H., and Rasschau, R. Alcoholism and Social Isolation. Journal of Abnormal and Social Psychology, 1964, 69, 681-689. Most such studies leave open the question of whether personality factors predispose to problem drinking or are, rather, effects of it. The McCord's study, however, using data on adolescent boys some of whom later became alcoholic, produced evidence that personality problems, e.g., a struggle with dependence, had a role in the etiology of alcoholism. Such evidence is in line with what has been suggested by numerous clinical studies, for example, Hanfmann, Eugenia. The Life History of an Ex-Alcoholic with an Evaluation of Factors Involved in Causation and Rehabilitation. Quarterly Journal of Studies on Alcohol, 1951, 12, 405-443.

[8] Emery, F. Characteristics of Guiness Drinkers. Longon, England: Tavistock Institute of Human Relations, 1960. Document No. 567. (Mimeographed)

Closer to our own work is that of Mary Jones (1967)[9] who, like Emery, set out to determine whether variations in drinking practices were associated with characteristics of personality. The subjects were 66 men, members of the Oakland Growth Study, who had been studied intensively for seven years beginning when they were 10-1/2 years old and who had taken part in follow-up studies when they were aged 33, 38 and 43. In the follow-up interviews at age 43 - in 1964 - Jones questioned the subjects carefully about their drinking and on the basis of the information they gave classified them according to the following amount - frequency scheme: (1) problem drinkers, (2) heavy drinkers, (3) moderate drinkers, (4) light drinkers, and (5) non-drinkers - abstainers. The California Q-sort (Block, 1961)[10] was used for obtaining measures of personality attributes, the basis for the Q-sorts being a series of intensive interviews averaging 12 hours over-all, conducted when the subjects were aged 38. Ratings were the pooled judgments of two psychologists. Numerous differences among problem drinkers, moderate drinkers, and abstainers were found. Concerning the moderate drinkers Jones writes, "On the whole, ratings for being controlled, consistent, objective, moralistic, and ethical with a high aspiration level are above average for this group of men but their position is midway between the problem drinkers in one direction and non-drinkers in the other."[11]

In another part of the study Jones showed that the differences in personality among her three groups of drinkers were already beginning to show themselves when the subjects were in junior high school. During the early years of the Oakland Growth Study, when the subjects were 10-1/2 to 17-1/2, they were given numerous tests of abilities, attitudes, and interests; they were interviewed, observed in various natural settings and rated on personality characteristics. Parents contributed information on family background and home life, teachers reported on classroom behavior, and classmates gave their impressions. On the basis of all this material three psychologists sorted for each subject the 100 items in the California Q-sort, once for the junior high school period and once for the senior high school period. It was found that 53 per cent of the 36 items which differentiated among the men in the three drinking categories in adulthood were also differentiating at the junior high school level, 44 per cent at the senior high school level. This is evidence that personality factors may predispose not only to problem drinking, as the work of the McCords[12], indicated, but to other forms of alcohol-related behavior as well.

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[9] Jones, Mary. Personality Correlates and Antecedents of Drinking Patterns in Adult Males. Journal of Consulting Psychology, 1967. (In press)

[10] Block, J. The Q-Sort Method of Personality Assessment and Psychiatric Research. Springfield, Ill.: Charles C. Thomas, 1961.

[11] Jones, op. cit.

[12] McCord and McCord, op. cit.

Background of the Present Study

The present study is a continuation of the work initiated by Fred and Zelda Strassburger,[13] or, one might better say, the Strassburger's paper was the first fruit of a plan to investigate drinking in relation to personality as a part of the Student Development Study.

This study began in the summer of 1961, at a time when the Institute for the Study of Human Problems was also beginning an intensive study of alcohol problems for the Cooperative Commission on the Study of Alcoholism. Accordingly, when plans were being made to administer a battery of tests to the entering freshman classes at Stanford and at Berkeley, it was natural to think that items pertaining to alcohol should be included. Fifty-four such items, written by Max Levin and Mary C. Jones, were included among the personality and attitude scales being used.

The Strassburgers used these 54 items in developing two 10-item attitude scales, one (Scale I) measuring favorableness of attitude toward social drinking, the other (Scale II) tolerance or enlightenment of view with respect to "alcoholism and the alcoholic." Examples of the items in Scale I are "All things considered, drinking does people more good than harm." (True), and "It is best not to go around with people who drink." (False); in Scale II: "An alcoholic is an ill person." (True) and "A drunk makes me feel disgusted." (False). The scales had adequate internal consistency and were validated by comparison with ratings of attitudes and drinking behavior made on the basis of freshmen interviews with 92 Stanford freshmen and 102 Berkeley freshmen.

The major finding of the Strassburger's study was that freshmen who are favorably disposed toward the use of alcohol and have enlightened views of alcoholism score higher than others on the Social Maturity and Impulse Expression Scales.

Method

The basic data of this study were obtained from 271 senior men and 213 senior women--all of Stanford.* These subjects filled out the Senior Questionnaire, which contained enough questions about drinking so that is was possible to classify the subjects according to a scheme that combined frequency of drinking hard liquor and frequency of being drunk:

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[13] Strassburger, Fred and Strassburger, Zelda. Measurement of Attitudes Toward Alcohol and Their Relation to Personality Variables. Journal of Consulting Psychology, 1965, 29, 440-445.

*Analysis of data on Berkeley students is still in progress. Results obtained thus far indicate that there are some differences, of a rather complicated nature, between Berkeley and Stanford but the general trends are similar at the two schools.

Group 1: Abstainers: never drink, never drunk

Group 2: Drinks but doesn't get drunk: Drinks
daily
1 or 2/week
1 or 2/month
but has not been drunk in past year

Group 3: Drinks seldom but gets drunk: Drinks
1 or 2/month
1 or 2/year
but has not been drunk more than
once in past year

Group 4: Drinks frequently and gets drunk:
Drinks
daily
1 or 2/week
and has been drunk more than once
in past year

For most of these subjects, scores on the following instruments were available:

The Strassburger Scales I and II (for freshman and senior years)

Omnibus Personality Inventory, six scales, (for freshman and senior years)

Ethnocentrism (E) Scale (for freshman and senior years)

Authoritarianism (F) Scale (for freshman and senior years)

California Psychological Inventory (CPI) (for freshman year)

Selected Items from the Senior Questionnaire

We are thus in a position to relate scores on the Strassburger scales with various personality measures, and to compare subjects in the various categories of drinking behavior in terms of their Strassburger Scale scores as well as in terms of their scores on the personality measures. Because sex differences of some importance appear in the data, it has seemed well to carry out separate analyses for men and for women.

Results

Attitudes toward Drinking and toward Alcoholism in Relation to Personality and to Drinking Behavior

Correlations between scores on the Strassburger scales and scores on the OPI and the E and F scales are shown in Table I. Also shown in the table are the correlations, found in the groups of freshman and senior men and women, between Scale I and Scale II. Despite the fact that the scales have three items in common, one of these items being scored in the opposite direction in the two instances (Strassburger and Strassburger, 1965), these correlations are not very high. This suggests that the scales actually measure somewhat different attitudes, an interpretation that is consistent with the fact that their correlations with the personality measures are strikingly different in some cases.

Table I

Correlations between Strassburger Scales (S I and S II) and OPI, E and F Scales
Stanford

	Freshman Women (N=380)		Freshman Men (N=773)		Senior Women (N=123)		Senior Men (N=162)	
	S I	S II	S I	S II	S I	S II	S I	S II
SM	.16*	.39*	.18*	.38*	.28*	.44*	.15	.35*
IE	.25*	.26*	.34*	.29*	.28*	.23*	.30*	.27*
SF	.02	-.06	.10*	.02	.05	-.01	.04	-.06
MF	-.06	-.03	-.04	-.08	.02	-.07	-.08	-.08
ES	-.02	.12	.04	.15*	.20	.27*	.04	.10
DS	.29*	.43*	.35*	.46*	.26*	.41*	.30*	.47*
F	-.10	-.30*	-.13*	-.33*	.12	.11	.02	-.31*
E	-.04	-.17*	-.01	-.13*	-.09	-.16	.08	-.20*
S I		.44*		.55*		.35*		.48*
S II	.44*		.55*		.35*		.48*	
	*p(r ≧.13)=.05		*p(r ≧.09)=.05		*p(r ≧.23)=.05		*p(r ≧.20)=.05	

We may note first a confirmation of the Strassburgers' major finding: favorable attitudes toward drinking and non-punitive attitudes toward alcoholics go with higher scores on the Social Maturity (SM) and Impulse Expression (IE) scales. Positive correlation of approximately the same order are found in all four groups of subjects. These findings are consistent with, and are to some extent bolstered by, the positive correlations between the alcohol scales and Developmental Status (DS), a scale which is correlated with SM and IE and, like these instruments, measures maturity, flexibility, sophistication, tolerance, and acceptance of impulses.

Little can be made of the fact that, in all of the groups of subjects, SM correlates more highly with Scale II than with Scale I. It is worth noting, however, that the SM scale was derived from the F scale which, in all the groups but one, is correlated significantly with Scale II but is in no group correlated with Scale I. It may be suggested that in a drinking culture (the Strassburgers have reported that in their sample of Stanford freshmen 78% of the men and 77% of the women were users of alcohol) we should not expect to find much opposition to drinking on the part of authoritarian subjects, but when it comes to alcoholics--a group that is deviant or "different," a group that might be blamed for their condition--the authoritarian tendencies toward stereotyped thinking, rigid moralism, and punitiveness come to the fore.

Mean scores on Scales I and II of freshman and senior men and women grouped according to drinking pattern are shown in Table II. First to be noted here is a sex difference in the way the subjects are distributed among the drinking categories. For men the modal pattern is to drink and to get drunk occasionally, whereas for the women the modal pattern is to drink but not get drunk. Comparatively few of the women abstain or drink frequently and get drunk.

The Strassburgers suggested, on the basis of studies of interview protocols that many women "swim with the tide" on questions of social drinking, allowing their drinking behavior to be determined by the climate of opinion or by the particular occasion. It is as if alcohol did not mean as much to them personally as it does to men. That so small a proportion of the women abstain is not surprising when considered in the light of the survey by Straus and Bacon,[14] who found that whereas only 46% of the female as compared with 69% of the males in their large sample of students in various colleges were users of alcohol, the proportions were approximately the same at private, nonsectarian schools, i.e., schools like Stanford. Also, there is evidence that there is more drinking among young people in the 1960's than there was in 1953, when Straus and Bacon conducted their survey.

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[14] Straus, R. and Bacon, S. Drinking in College. New Haven, Conn.: Yale University Press, 1953.

Table II

Scores on Strassburger Scales I[1] and II[2] for Stanford Men and Women as Freshmen (1961) and Seniors (1965)

Stanford Men

	Abstain	Drink-Never Drunk	Drink Occ. Drunk more than once	Drink Freq. Drunk more ten times	Significant Difference between Groups (p ≤ .05)
	Mean S.D.	Mean S.D.	Mean S.D.	Mean S.D.	
1961	(N=33)	(N=31)	(N=70)	(N=48)	
S I	2.67	4.77	4.56	5.48	I-II,I-III,I-IV,
	1.49	1.73	1.98	1.97	III-IV
S II	4.21	6.58	6.79	7.06	
	1.58	2.00	1.78	1.98	I-II,I-III,I-IV
1965	(N=22)	(N=17)	(N=44)	(N=30)	
S I	3.86	5.76	6.64	6.80	I-II,I-III,I-IV,
	1.70	1.09	1.22	1.24	II-III,II-IV
S II	5.82	7.76	8.30	8.57	
	2.04	1.30	1.37	1.30	I-II,I-III,I-IV, II-IV

Stanford Women

	Abstain	Drink-Never Drunk	Drink Occ. Drunk more than once	Drink Freq. Drunk more ten times	Significant Difference between Groups (p ≤ .05)
1961	(N=6)	(N-58)	(N=34)	(N=13)	
S I	3.50	4.28	4.94	4.15	
	0.55	1.68	1.56	1.63	I-III
S II	5.33	6.76	7.64	6.61	
	1.86	1.81	1.86	1.85	I-III
1965	(N=6)	(N=34)	(N=23)	(N=10)	
S I	4.00	5.94	6.04	6.60	I-II,I-III,I-IV
	1.10	1.46	1.22	1.26	
S II	7.00	7.85	8.17	8.20	
	1.67	1.40	1.30	0.63	I-IV

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[1] Attitude Towards Social Drinking (high score means favorable)

[2] Attitude Towards Alcoholism (high score means favorable)

The data in Table II also show that our subjects' reported drinking behavior is consistent with their attitudes toward drinking and toward alcoholism. For senior men and women scores on both Scale I and Scale II increase directly with frequency of reported drinking and drunkenness, and the same tendency is also found in freshmen. In freshmen as well as in seniors, men and women abstainers are significantly less sympathetic toward drinking and toward alcoholics than are subjects reporting various patterns of drinking.

In all groups of abstainers and drinkers the mean scores of seniors on the Strassburger scales are higher than those of freshmen.

Drinking Behavior and Personality

The mean personality scale scores - OPI, F, E, - of subjects in the four drinking categories are given in Table III. What first strikes the eye here is the fact that abstainers are a very distinctive group. Male and female abstainers, both as freshmen and as seniors, score lower than drinkers on Social Maturity, Impulse Expression, and Developmental Status; these groups of abstainers are also higher on Authoritarianism, though it is only in the female group that the differences are statistically significant. These results are consistent with those involving the Strassburger scales, and serve to give a picture of abstainers as, in general, relatively moralistic, constricted, and unsophisticated. This picture is similar to that which emerged when Jones[15] applied the Q-sort technique to the adult abstainers in her study: they were distinguished from problem drinkers and moderate drinkers by being more overcontrolled, emotionally bland, fastidious, introspective, moralistic, considerate, and giving.

Among the drinking groups we find, as might be expected, that men who drink frequently and get drunk are higher on Impulse Expression than men who drink but are never drunk. But here the women veer off in a different direction. Both as freshmen and as seniors women who drink occasionally but get drunk not only score much higher in Impulse Expression and Developmental Status than do those who drink without getting drunk - which is not inconsistent with the findings for men - but they score higher than do those who drink _frequently_ and get drunk. One clue as to the meaning of this finding may be found in the fact that women in the "drink occasionally-get drunk" category score highest on Schizoid Functioning; this suggests that they are conflicted, and have difficulty in either accepting or controlling their impulses. Another interpretation is suggested by what was said earlier about women swimming with the tide:

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[15] Jones, _op. cit._

Table III.

Personality Scale Scores of Stanford Men and Women Students in Four Drinking Groups

Stanford Men

	I Abstainers		II Drink Never Drunk		III Drink Occ. Drunk more than once		IV Drink Freq. Drunk more 10 times		t ratios between			
	(N=36)		(N=33)		(N=73)		(N=52)					
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	I-II	I-III	I-IV	
Freshmen[1]												
SM[2]	46	12	52	8	50	9	50	11	2.37*	2.04*		
IE	44	9	47	10	50	9	51	10		2.91**	3.51***	
SF	50	9	48	11	49	10	50	10				
MF	53	11	47	11	49	10	50	10				
Es	52	11	52	9	49	10	49	11				
DS	44	11	48	7	51	10	51	10		3.56***	3.40**	
F	116	28	110	20	110	22	109	21				
E	53	18	50	17	53	17	55	19				
Seniors	(N=24)		(N=20)		(N=46)		(N=31)		I-III	I-IV	II-IV	III-IV
SM	52	12	58	8	59	9	59	9	2.65*	2.64*		
IE	46	10	50	9	52	9	57	9	2.85*	4.37***	2.81**	2.34*
SF	46	10	44	10	45	9	49	9				
MF	49	13	50	10	47	9	45	12				
Es	52	13	53	11	53	10	52	10				
DS	51	12	56	9	60	9	64	9	3.51***	4.50***	3.13**	
F	98	29	98	28	96	23	88	28				
E	43	16	46	19	45	14	42	18				

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* $p \leqq .05$; ** $p \leqq .01$; *** $p \leqq .001$

[1] Scores were also computed for those freshmen for whom we have both freshmen and senior responses (Men N=118, Women N=78). Their scores are nearly the same as the scores of students reported here (Men N=194, Women N=121), about a third of whom did not respond to the senior test.

[2] SM = Social Maturity, IE = Impulse Expression, SF = Schizoid Functioning, MF = Masculinity-Femininity, Es = Esthetic Sensitivity, DS = Developmental Status, F = Authoritarianism, E = Ethnocentrism. The first six scales are reported in standard scores, F and E in raw scores.

Table III

Personality Scale Scores of Stanford Men and Women Students in Four Drinking Groups (cont.)

Stanford Women

	I Abstainers (N=7) Mean	S.D.	II Drink Never Drunk (N=61) Mean	S.D.	III Drink Occ. Drunk more than once (N=36) Mean	S.D.	IV Drink Freq. Drunk more 10 times (N=14) Mean	S.D.	t ratios between * I-II	I-III	II-III	III-IV
Freshmen[1]												
SM[2]	45	8	52	10	50	12	50	6				
IE	49	6	48	9	56	8	49	7			3.98***	2.71**
SF	54	5	49	9	55	8	49	9			2.95**	1.96
MF	49	10	49	10	50	12	50	11				
Es	54	8	51	10	47	12	51	10			1.98	
DS	43	7	49	11	55	9	47	5		3.18**	2.38*	2.84**
F	120	22	101	22	104	25	109	14	2.14			
E	51	19	49	14	45	16	45	15				
Seniors	(N=6)		(N=37)		(N=25)		(N=10)		I-II	I-III	I-IV	II-III
SM	50	8	59	10	58	11	58	8	2.24*		2.09*	
IE	43	5	51	9	61	10	57	10	2.60**	4.21***	3.10**	3.58***
SF	44	7	44	8	52	10	48	12				3.10**
MF	49	9	49	10	48	11	52	11				
Es	49	6	54	9	50	13	53	11				
DS	50	6	60	10	67	10	62	9	2.27*	3.64***	2.59*	2.26*
F	112	22	89	25	91	27	89	22	2.13*			
E	50	14	39	15	44	20	39	14				

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* See Preceding page.

[1] See footnote 1, preceding page.

[2] See footnote 2, preceding page.

women who drink frequently may simply be the most "social," in the sense that they have many dates and often find themselves in situations where drinking is the order of the day. This is conventional behavior for Stanford women; it may well be that those who drink only occasionally but get drunk find more pleasure and meaning in their drinking - drink more like men we might say - in which case we should expect them to be more "impulse expressive" and sophisticated.

The mean California Psychological Inventory (CPI) scores obtained as freshmen by subjects in the various drinking groups (Senior Questionnaire) are shown in Table IV. It may be seen that the male abstainers score lower than drinkers on dominance, capacity for status, sociability, social presence, self-acceptance and flexibility, and higher on responsibility, socialization, self-control and femininity. Here again the abstainers stand out as being shy, retiring, socially uncomfortable, controlled in behavior, and rather rigid in their thinking. Among the three drinking groups, those who do not get drunk score higher than those who do on measures of responsibility, socialization, capacity to make a good impression, and achievement via conformance, suggesting that this group drinks when it seems appropriate but with much caution.

The female abstainers (Table IV) score significantly lower than the drinking groups on social presence, achievement via independence, and flexibility, indicating that they tend to be lacking in social poise and also conforming and rigid in their thinking. The most deviant group on the CPI (as on the OPI) are the girls who drink infrequently but do get drunk. Compared to the large group of girls who drink often but do not get drunk, this group is significantly lower in dominance, sociability, sense of well-being, responsibility, socialization, self-control, tolerance, capacity to make a good impression, communality (responding to items as majority of subjects do), achievement via conformance, independence, intellectual efficiency and femininity. Compared to the girls who drink frequently and get drunk, these infrequent drinkers who get drunk scored lower on sociability, socialization, self-control, good impression, and achievement via conformance. These data substantiate the hypothesis, suggested by the OPI results, that the girls who drink seldom but do get drunk are a troubled, conflicted group, not quite in control of themselves, and also perhaps ashamed of behavior which they feel they ought to control. The large group of girls who drink often but don't get drunk seem to be following an expected and acceptable pattern, enabling them to adapt smoothly to social demands. The girls who drink often and get drunk now and then do not seem to feel troubled or conflicted about their behavior. As suggested above, they seem to be well within the limits of conventional behavior at Stanford.

Table IV

California Psychological Inventory (CPI) Scale Scores of Stanford Men and Women Freshmen in Four Drinking Groups

Stanford Freshman Men

	I Abstainers (N=35)		II Drink Never Drunk (N=34)		III Drink Occ. Drunk more than once (N=78)		IV Drink Freq. Drunk more 10 times (N=53)		Significant t ratios between groups				
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	I-II	I-III	I-IV	II-III	II-IV
Do[1]	51	12	57	10	56	10	57	12	2.36*	2.15*	2.52*		
Cs	51	8	59	8	56	8	55	9	4.22***	2.83**	2.26*		
Sy	46	9	56	9	54	8	54	9	4.85***	4.38***	3.79***		
Sp	46	9	57	13	58	9	60	11	4.31***	6.97***	6.50***		
Sa	53	8	64	9	63	8	62	10	5.42***	6.11***	4.45***		
Wb	47	14	50	12	49	12	47	12					
Re	54	10	54	10	50	10	49	9			2.18*	2.03*	2.37*
So	56	10	54	9	52	9	49	10			3.18**		2.45*
Sc	49	10	46	10	44	11	44	9		2.73**	2.88**		
To	49	11	52	9	51	10	51	9					
Gi	49	11	51	10	46	11	46	9				2.05*	2.32*
Cm	49	12	51	9	50	10	49	10					
Ac	52	8	53	9	51	11	49	10					2.19*
Ai	57	10	58	8	57	11	57	9					
Ie	50	10	52	8	52	10	52	10					
Py	53	9	56	9	55	10	54	12					
Fx	50	12	55	10	57	12	58	12		2.68**	2.70**		
Fe	56	10	51	11	50	9	48	8		3.21**	3.85***		

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* $p \leqq .05$; ** $p \leqq .01$; *** $p \leqq .001$

[1] Do = dominance, Cs = capacity for status, Sy = sociability, Sp = social presence, Sa = self acceptance, Wb = well-being, Re = responsibility, So = socialization, Sc = self control, To = tolerance, Gi = good impression, Cm = communality, Ac = achievement via conformance, Ai = achievement via independence, Ie = intellectual efficiency, Py = psychological-mindedness, Fx = flexibility, Fe = femininity.

Table IV

California Psychological Inventory (CPI) Scale Scores of Stanford Men and Women Freshmen in Four Drinking Groups

Stanford Freshman Women

	Abstainers (N=9) Mean	S.D.	Drink Never Drunk (N=65) Mean	S.D.	Drink Occ. Drunk more than once (N=36) Mean	S.D.	Drink Freq. Drunk more 10 times (N=18) Mean	S.D.	Significant t ratios between groups* I-II	I-III	I-IV	II-III	III-IV
Do[1]	60	10	57	9	52	10	57	10		2.08*		2.27*	
Cs	54	6	58	10	58	10	57	9					
Sy	52	10	54	9	50	10	57	8				2.39*	2.33*
Sp	47	9	55	9	58	11	58	9	2.45*	2.72**	2.75**		
Sa	56	12	59	9	57	10	60	9					
Wb	49	8	49	9	43	11	49	12				3.22**	
Re	51	6	56	7	49	8	53	9				4.40***	
So	53	4	51	9	47	9	53	9				2.03*	2.27*
Sc	45	9	45	10	37	9	44	12		2.27*		4.10***	2.25*
To	53	8	58	8	50	9	55	10				4.27***	
Gi	47	8	48	9	40	8	45	10		2.27*		4.27***	2.07*
Cm	49	8	48	7	44	10	49	7				2.28*	
Ac	51	6	52	8	45	9	51	8				4.09***	2.14*
Ai	54	6	63	8	60	7	60	7	3.39*	2.46*	2.15*	2.04*	
Ie	51	8	57	7	53	10	57	8	2.03*			2.26*	
Py	52	7	57	8	54	9	56	9					
Fx	46	7	60	12	60	10	58	10	3.47*	3.77***	3.21**		
Fe	56	6	52	10	45	10	49	9		3.04*	2.02*	3.04**	

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* See preceding page.

[1] See footnote 1, preceding page.

The four drinking groups differed in their responses to a number of the Senior Questionnaire items (Table V). Usually the abstainers, or the abstainers and those who drink without getting drunk, differed from the groups who drink and get drunk. The important dimension here seems to be strength of impulse and degree of control, the heavier drinkers having more fun, the non-drinkers being somewhat constrained.

In general, senior men (Table V) who drank and were drunk were more social, more influenced by peers, more permissive about sex, had more intimate sexual relationships, had more physical complaints and periods of depression than non-drinkers. Abstainers (and to some extent controlled drinkers) were less sociable, less influenced by peers, less permissive about sex, more inhibited in sexual behavior and more religious.

The three groups of drinkers differed in some of their reasons for drinking. Those who got drunk said more often that drinking made them feel confident and relaxed them and that they especially liked to get high and to drink on dates. Those who did not get drunk attributed less importance to these reasons for drinking.

In the case of women, abstainers indicated the least amount of participation in social activities, the greatest involvement in church and frequency of prayer, and the least change in moral values during college. Compared with girls who drink they indicated that they had more frequent conflict with girl friends and less conflict with adults in authority. They were more opposed to premarital sexual relationships and had a lower degree of sexual intimacy than girls who drink. These girls who abstain from drinking seem to be religious and some may be rather priggish, determined to be good girls, to assure their virtue by living according to certain rules. They probably tend to be critical and judgmental of other girls and to find it hard to be friends.

The girls who drink seldom but do get drunk devoted the least time to church activities and were the least inclined to pray. They were the most affected during their college years by problems in their own family (17% had a drinking problem in their immediate family versus 6% for the group who drink and don't get drunk and 0% for the abstainers and frequent drinkers) and of confrontation with problems and conflicts in themselves. Of the four groups they indicated the most frequent conflict with adults in authority. They were the most permissive regarding premarital sexual relationships and had the greatest amount of sexual intimacy but also the greatest conflict over sexual impulses. They more often than the other girls said that drinking helps them feel more confident. The questionnaire data certainly support the impression gained from the personality measures that this group of girls who drink seldom but get drunk are

Table V

Senior Questionnaire Responses of Stanford Men and Women in Four Drinking Groups (Figures are percentages)

	Stanford Men					Stanford Women				
	Abstain	Drink Never Drunk	Drink occ. Drunk once	Drink Freq. Drunk once	χ^2	Abstain	Drink Never Drunk	Drink occ. Drunk once	Drink Freq. Drunk once	χ^2
	(N=39)	(N=34)	(N=82)	(N=55)		(N=10)	(N=67)	(N=36)	(N=15)	
During college years engaged in:										
Social activities										
freq.	13	59	57	62	43.13***	20	57	53	87	12.88*
occ.	49	29	38	33		70	42	44	13	
never	38	12	5	5		10	1	3	0	
Seeking off-beat places and people										
freq.	5	9	5	7	19.67**					
occ.	26	26	57	56						
never	69	65	38	36						
Breaking rules for fun										
freq.	0	0	1	7	19.80**					
occ.	5	21	27	33						
never	95	79	72	60						
Church activities										
freq.						60	19	8	30	14.72*
occ.						30	30	19	27	
never						10	49	72	53	
Changed since entering college in:										
Kinds of friends										
little	62	32	27	24	22.16**					
moder.	23	56	40	54						
much	15	12	33	22						
Freedom to express feelings and desires										
little	28	12	26	15	13.02*					
moder.	49	53	29	49						
much	23	35	45	36						

Table V (cont.)

	Stanford Men					Stanford Women				
	Abstain	Drink	Drink occ.	Drink freq.	x^2	Abstain	Drink	Drink occ.	Drink freq.	x^2
Changed since entering college in:										
Moral views										
little						50	22	11	13	10.92
moder.						50	51	50	60	
much						0	27	39	27	
Changes in college influenced by:										
Gaining understanding of self						Confrontation with problems and conflicts in self				
little	10	3	1	9	11.90*	0	3	0	13	14.16**
moder.	36	26	39	47		60	36	22	13	
great	51	71	60	44		40	61	78	73	
Relations with friends of same sex										
little	28	12	9	5	16.00*	10	9	11	7	10.74
moder.	49	53	50	49		40	55	25	27	
great	21	35	41	45		50	36	64	60	
Problems in family										
little						90	57	42	67	19.40**
moder.						0	36	28	27	
great						10	7	31	6	
In comparison with peers, developed physically:										
earlier						30	19	22	60	12.14*
same						60	70	64	27	
later						10	10	14	13	
During college disagreeing strongly with:										
Friends of the same sex										
freq.						50	11	17	20	21.70**
occ.						50	82	61	46	
never						0	6	22	33	
Adults in authority										
freq.						10	9	33	13	13.52*
occ.						90	85	56	80	
never						0	6	11	7	

Table V (cont.)

	Stanford Men					Stanford Women				
	Abstain	Drink	Drink occ.	Drink freq.	X^2	Abstain	Drink	Drink occ.	Drink freq.	X^2
Number of broken or severely strained friendships during college:										
none	72	65	52	40	20.09	0	49	39	33	20.12
one	18	9	16	31		50	18	31	27	
two	8	18	16	20		40	15	25	7	
three	3	3	45	5		10	9	6	13	
more	0	3	10	4		0	6	0	13	
During last two years of high school:										
no dates	33	3	2	4	47.26***					
1-2 year	18	9	18	15						
every mo.	13	26	18	13						
every wk.	15	26	32	40						
Anytime during college:										
going steady	26	56	56	62	14.40*					
Full sexual relations permissible to the male before marriage:										
agree strong	8	26	40	62	47.68***	0	19	44	27	40.34***
agree mod.	36	26	38	25		40	34	47	53	
neutral	10	18	5	5		0	15	3	0	
disagree moder.	18	18	7	5		20	24	6	20	
disagree strong	28	12	9	2		40	7	0	0	
Attitudes towards sex conflicted:										
much						50	28	47	27	13.64*
moder.						20	60	36	73	
little						30	12	17	0	
Sexual impulses difficult to control:										
much						10	4	14	33	14.70*
moder.						50	54	64	40	
little						40	42	19	27	
During college sexual impulses increasingly more acceptable:										
little	21	18	13	5	12.64*					
moder.	67	65	55	55						
much	13	15	30	36						

Table V (cont.)

	Stanford Men					Stanford Women				
	Abstain	Drink	Drink occ.	Drink freq.	X^2	Abstain	Drink	Drink occ.	Drink freq.	X^2
Degree of sexual intimacy during college:										
low	67	38	23	4	51.86***	20	16	8	0	12.15*
moder.	18	35	48	53		40	55	33	60	
high	13	21	29	44		30	28	58	40	
Having felt physically out of sorts during an average month in senior year:										
never	41	21	16	18	28.75*					
1 or 2	56	62	56	73						
3-5 times	3	9	22	7						
6-10 times	0	3	5	10						
daily	0	6	1	1						
Frequency of feeling depressed in the past few years:										
daily	3	6	4	5	29.26*					
few/week	10	3	18	20						
few/month	28	44	50	34						
few/year	44	41	27	33						
once/year	3	1	1	4						
never	13	0	0	4						
Praying										
freq.						60	18	11	33	19.16**
occ.						20	30	17	13	
almost never						0	21	28	33	
never						20	31	44	20	
Pray to find out what is God's will:										
	21	3	6	0	14.06**					
Drinking behavior and attitudes:										
Drink beer										
daily	3	9	10	27	141.08***	0	0	0	7	75.81***
weekly	10	3	18	20		0	24	44	67	
monthly	28	44	50	34		0	45	53	27	
yearly	3	1	1	4		30	22	3	0	
never	13	0	0	4		70	9	0	0	

Table V (cont.)

	Stanford Men					Stanford Women				
	Abstain	Drink	Drink occ.	Drink freq.	X^2	Abstain	Drink	Drink occ.	Drink freq.	X^2
Drink wine										
daily	0	0	0	2	80.35***					
weekly	8	0	10	16						
monthly	10	56	50	65						
yearly	31	38	34	13						
never	51	6	6	4						
Reasons for use of alcoholic beverages:										
Makes me feel confident										
very imp.		0	0	4	10.92*		0	3	0	22.93***
fairly imp.		9	30	20			4	39	13	
not import.		91	70	76			94	58	80	
Like to get high										
very		0	20	20	33.88*		3	19	13	29.18***
fairly		32	56	65			24	61	53	
not		68	24	13			70	19	33	
On dates especially										
very		3	7	13	14.57**		7	14	33	9.35*
fairly		29	48	60			42	50	47	
not		68	45	27			48	36	20	
Relaxes me										
very		15	32	31	10.60*		12	31	40	13.33**
fairly		50	56	55			64	67	47	
not		35	12	15			22	3	13	
Special occasions (holidays)										
very							24	25	47	10.06**
fairly							69	64	27	
not							7	11	27	
Helps me get over bad moods, depression										
very							0	3	13	15.11***
fairly							13	31	33	
not							85	67	53	

Table V (cont.)

	Stanford Men					Stanford Women				
	Abstain	Drink	Drink occ.	Drink freq.	X^2	Abstain	Drink	Drink occ.	Drink freq.	X^2
Get over boredom										
very							1	6	7	14.06***
fairly							3	22	27	
not							94	72	67	
Know personally anyone with a drinking problem										
yes	31	53	66	56	13.10**	50	40	56	93	12.92**
no	64	44	32	36		50	55	44	7	
father						0	6	11	0	
mother						0	0	3	0	
brother or sister						0	0	3	0	
relative						20	9	22	20	
friend						40	28	44	80	

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* $p \leqq .05$; ** $p \leqq .01$; *** $p \leqq .001$

troubled and conflicted, unable to accept or to suppress their impulses. Perhaps they are in a period of flux, where their values and self-concepts are changing.

The group who drinks frequently and gets drunk are characterized by much social activity, early physical development, fairly high sexual intimacy attended by some conflict. They drink especially on dates and special occasions and for relaxation. Many of them (93%) know someone with a drinking problem, but none has a drinking problem in her immediate family. This is probably a sociable, fun-loving group of girls who grew up earlier than their peers.

In summary, our data indicate that drinking behavior--crudely described in terms of frequency and amount--as well as attitudes toward drinking and toward alcoholism is related to personality characteristics.

Where drinking is the norm, as at Stanford, abstainers - both male and female - stand out as a relatively rigid, intolerant, and immature group. For men students, the modal pattern is to drink and get drunk and the students who follow this pattern tend to be the most self-accepting, tolerant, and socially mature group. Among women, however, the modal pattern is to drink often but not get drunk, to go along with the group but to maintain self-control. There is a rather small group of sociable, self-accepting girls who drink often and do get drunk, but there is a larger group of troubled and conflicted girls who drink seldom and get drunk. Control seems to be a more important issue for women than for men, women being less able to permit and enjoy expression of impulse.

Change in College

a) Attitudes. As shown in Table II and noted above, in all groups of male and female drinkers and abstainers seniors score higher, i.e., in the more liberal or tolerant direction, than freshmen on the two Strassberger scales. Differences on particular items are interesting, and show something of the contrasting frames of mind of entering and graduating students. In the following examples of figures in the columns are per cents of students answering "YES."

Item	Men		Women	
	Freshmen	Senior	Freshmen	Senior
3 On a date it is up to the girls to set the standards in regard to drinking behavior.	19	16	76	47
5 Most people drink because of personal problems.	38	15	32	19
6 All things considered, drinking does people more good than harm.	15	32	09	19
7 I resent people who preach the evils of drink.	45	57	45	66
12 People with a purpose in life have no need for alcohol.	63	30	51	16
13 People with adequate morals cannot become problem drinkers.	31	11	26	08
19 It is best not to go around with people who drink.	44	13	41	09
26 Most teen-agers drink merely to defy authority.	69	65	76	74
34 Only people with weak characters drink to excess.	37	17	28	07
36 The law should permit serving liquor to 18-year olds.	42	69	34	70
38 I have gotten away with buying a drink when I was under the legal age limit.	32	71	28	76
49 College students should be allowed to drink as often and as much as they like.	28	68	20	66
52 An alcoholic is an ill person.	88	92	93	92

Not only are seniors more favorable toward drinking in general (items 6, 36, 38 and 49 particularly) and toward freedom of choice for the individual (items 7, 36, 49) but they are more straightforward in reporting their own drinking behavior (item 38) and less given to moral rigidity (items 12, 13, 19, 34). They are more confident of their ability to control themselves (item 3 - women particularly) and generally more knowledgeable and sophisticated (items 5, 12, 34). Although freshmen as well as seniors think of alcoholism as an illness (item 52), the former are much more likely, nonetheless, to see it as a moral failure.

This is by no means the only instance of inconsistency in the thinking of freshmen. Thus very few believe that drinking does more good than harm (item 6) but there is nonetheless relatively strong resentment of people who preach its evils (item 7). Freshmen rather overwhelmingly believe that most teen-agers drink merely to defy authority (item 26) but relatively few of them believe that college students should be allowed to drink as they please (item 49). Revealed here, it seems, is an important aspect of the freshman's developmental status: He has conflicts about authority, not being quite able to do with it or to do without it; while striving for independence, he nevertheless wants authority to be there in case he needs it. Seniors are not altogether free of this conflict, but they are more consistent; their opposition to authority is even stronger than that of the freshmen (items 7 and 38) and they expect teen-agers to defy it but they do not then turn around and ask for external controls of their behavior in college (item 49).

b) Behavior. Our data on overt drinking practices are, unfortunately, far from complete. No instrument comparable to the Senior Questionnaire was administered to freshmen; hence, in describing the reported practices of this group of students we must limit ourselves to those who were interviewed. The Strassburgers, it will be recalled, used these subjects - 92 Stanford freshmen and 102 Berkeley freshmen - in their study, rating their drinking behavior on the basis of what they said about this subject in interviews conducted six months after the beginning of the academic year. Unfortunately - again - the Strassburger's raw data, including their original ratings, were lost or destroyed, making it impossible to follow up as seniors the individuals who were rated as freshmen. This means that in comparing freshmen and seniors we have to rely on the Strassburger's published findings - which are based on ratings of interviews - and on the Senior Questionnaires. Thus, we are reporting on different samples of freshmen and of seniors. We also must rely mainly on data pertaining to Berkeley students, for it was only these students who figured in the Strassburger's report on the drinking practices of freshmen.

It was possible to categorize the reported frequency of drinking of Berkeley seniors according to a scheme that is essentially equivalent to that used in the Strassburger ratings: a) Abstain, b) Occasionally or infrequently (once or twice a year), c) Moderately (once or twice a month), d) Heavy or frequently (daily, or once or twice a week). There follows a comparison, in these terms, of Berkeley freshmen and Berkeley seniors, men and women being treated separately.

	Males				Females			
	Freshman		Seniors		Freshman		Seniors	
	N	%	N	%	N	%	N	%
Abstain	25	39	18	6	17	32	21	9
Occasionally or Infrequently	24	38	37	15	22	41	49	22
Moderate	14	22	98	39	14	26	106	47
Heavy or Frequently	1	2	97	39	0	0	51	22

In the case of one category, abstaining, the data may be supplemented by data from Stanford. The Strassburgers reported, concerning their Stanford sample of freshmen, that 78% of the men and 77% of the women were users of alcohol. Taking these figures in conjunction with the Senior Questionnaire, we find that the per cent of abstainers in the freshman and senior samples of men are 22 and 19 respectively; in the samples of women 23 and 8 respectively.

Discussion

These data, though crude, make sense and are generally in accord with what might be expected. Let us consider first the case of abstainers. At Berkeley a relatively high proportion of the men, 39%, arrive at college without having begun to drink but most are introduced to alcohol at some time during their college careers. The same trend is to be observed in the case of the women, though there are fewer abstainers among them at the beginning of college. This is what we might expect: young people of conservative or religious backgrounds who might be from rural homes or who have had more or less protected upbringings become "liberated" at college or at least adapt themselves to the prevailing standards of the college community. It has often been noted by observers at Berkeley that men students come from more varied socio-economic backgrounds than the women, a fact which may well explain the sex differences in rates of abstainers.

But what about Stanford, where the proportion of abstainers is almost as great among senior men as among freshman men? Here it is suggested that since the great mass of these students come from families of relatively high socio-economic status, those who are going to drink begin to do so while they are still in high school. The persistent abstainers are therefore a quite distinctive group--as their personality test scores have indicated. To explain the differences between Berkeley and Stanford men, we may make use of the distinction drawn by the Strassburgers between "militant" and "tolerant" abstainers. Of the 25 abstainers in the Berkeley freshman sample only three were classified as militant. At Stanford, on the other hand, clinical evidence indicates that the great majority of the freshmen abstainers were militant, and that they stuck to their guns throughout their college careers. Typically, these young men come from homes in which there were religious scruples against drinking; they had apparently accepted their family values fully and they remained oriented toward their families throughout the four college years; they had their minds made up about their future careers when they arrived at college and they focused upon their work, allowing themselves to be influenced but little by their peers or by the general culture of the college. Their relatively high scores on F (Authoritarianism) and E (Ethnocentrism) and their relatively low scores on SM (Social Maturity), IE (Impulse Expression), and DS (Developmental Status) changed little during college.

With women, on the other hand, the story is different. There were no more militant abstainers at Stanford than there were at Berkeley. Indeed it is extremely rare that we find among women at either of these institutions such grim, family-supported, achievement orientation as that just described in the case of men. As suggested earlier it seems that with the women in our samples drinking is not as much of an issue as it is in the case of men. Some arrive at college without having begun to drink, having been brought up--we may imagine--in abstinent homes or otherwise protected environments, but most of these soon adapt themselves to the culture of the college--drinking enough to meet the demands of conformity but not enough to find in it an important means for the release of impulses.

Concerning the categories of drinkers, we find in both men and women a change in the general direction of greater frequency of drinking: Fewer subjects drink occasionally or infrequently, more drink moderately or frequently. This result is consistent with our findings concerning the personality correlates of attitudes and practices respecting alcohol. Greater frequency of drinking, like more liberal attitudes toward drinking and alcoholics, is associated with higher scores on SM, IE, and DS; these personality variables increase during the college years, and so does the frequency of drinking, both of these kinds of changes being, we may suppose, indications of the liberating effects of the college experience.

Here it must be noted that the changes which take place in students during the college years are rarely very radical, and generally they are congruent with what the students were like before. As we have seen, in freshmen as well as in seniors, personality variables are correlated with attitudes and practices respecting alcohol, and the attitudes and practices of seniors are correlated with personality variables measured when they were freshmen. This is consistent with Jones'[16] finding that the personality dispositions which in adults are associated with particular drinking practices are continuous with dispositions observed when these subjects were in junior high school. The general rule seems to be that subjects change in their absolute scores on personality measures but still tend to retain their positions relative to other subjects. Our senior abstainers, for example, who are high on the F scale as freshmen are not quite so high as seniors, but they are still higher than most other subjects. Again, students who are high on IE as freshmen are likely to be drinking with some frequency, and during college both their IE scores and the frequency of their drinking are likely to increase - hence a correlation between IE and frequency of drinking in seniors as well as in freshmen.

Practical Considerations

Let us now consider the implications for action of findings such as those we have reported. What should teen-agers be told about drinking and alcoholism? What should be a college's position respecting the drinking of its students? Concerning these relatively simple questions there are wide differences of opinion in our society, and discussion of them is likely either to be heated or avoided altogether. The trouble is that we as a society have not worked out any generally agreed-upon standards governing the use of alcohol. What is needed is an evaluative scheme based on the various contexts and meanings of drinking and abstaining, and of their implications for long-range social and individual developmental goals.

Our results can be the basis for some first steps toward the development of such a scheme, but merely to raise the question of action is to expose major deficiencies of the work we have reported. For one thing, our categories for describing behavior with respect to alcohol, though far from being meaningless, are too crude, too lacking in sensitivity and subtlety. Abstaining, for example, appears to have different meanings and different implications for action in different cases. It is correlated with authoritarianism, and authoritarianism is generally considered to be a mark of failure, or at least a delay, in personality development. Should we then regard abstaining as something that college students should get over as soon as possible? Hardly; for the relationship of abstention to authoritarianism is not so strong but that one can easily find abstainers who are not authoritarian. Presumably, in this latter case the abstainer would be less "militant," and perhaps freer of inner conflicts about the question of drinking. Similarly for the several categories of drinking. Heavy drinking, for example, (or "drinks frequently and drunk more than 10 times") is associated with higher scores in Impulse Expression, a variable which, in general, increases as students go through college and which is usually taken as a sign of progress toward maturity. But heavy drinking, as is well known, sometimes turns into problem-drinking--if it is not so already--and we are left with the important practical question of how to judge the significance of particular patterns of heavy drinking.

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[16] Jones, op. cit.

Here we meet the further difficulty that our measures of personality are not fine enough or sufficiently differentiated. It has been shown, for example, (Sanford, 1963)[17] that two students may obtain high scores on Impulse Expression for quite different reasons - in the one case the high score reflects the genuine freedom that comes with development in the ego and in the other it betrays a lack of control or the "acting out" of impulse. It might well be that heavy drinkers who are headed for trouble are characterized by this latter type of high Impulse Expression.

In sum, correlations between crude categories of drinking practices and insufficiently differentiated variables of personality, though suggestive, do not take us very far toward an understanding of the meaning of drinking within the context of personality. To gain an indication of how far we still have to go we need only consider what has been reported from clinical investigations of individuals with drinking problems. The psychoanalytic literature contains many reports in which alcohol-related behavior is shown to be dependent upon underlying personality needs and conflicts; for example, one man's problem drinking is said to be an expression of an unconscious fantasy of being reunited with the mother of his infancy, another man becomes intoxicated in order to make possible the indulgence of homosexual needs, another uses the same device in order to express hostility toward his restricting mother-wife; a woman's problem drinking is an acting out of her unconscious identification with her alcoholic or delinquent father, and so on. If these psychoanalytic formulations are valid they are of considerable significance, for we cannot believe that the personality functioning of problem drinkers is categorically different from that of ordinary drinkers.

When people who are not problem drinkers are studied clinically, as in the course of psychotherapy undertaken because of symptoms or complaints apparently unrelated to drinking, it is possible to see that personality processes and drinking practices are related in ways not unlike those found in problem drinkers. One of us saw in psychoanalysis and in psychoanalytic psychotherapy, over a period of nearly three years, a young woman, a social worker, who presented at the beginning a variety of symptoms including, most importantly, frigidity, but who drank abstemiously and only occasionally. During the course of the psychotherapeutic work she developed a pattern of dependence on beer and on coffee, switching from one to the other and arranging her life so that during her waking hours she was never without the felt effects of one or the other substance. This pattern, it seemed, was expressive of her deepest conflict. On the one hand she wanted to tear off, devour, possess totally--something, some source of life and power, be it her mother's breast or a man's penis, and on the other hand, she wanted to be sweet and good, full of love and loved fully, free of all aggressive impulses. Beer enabled her to achieve something of this latter state; it allowed her to feel for a time warm, comfortable, and loved (another effort in the same direction was her restricting herself to soft foods; biting or chewing made her unbearably anxious); but if the drinking continued, these good feelings began to give way to feelings of helplessness, stupidity, and passivity which meant for her giving up her masculine strivings and all hope of success and power. She needed coffee to make her snap out of it. Coffee could for a time make her feel alert and ambitious and she could then do some work, but pretty soon the destructive impulses would be aroused, anxiety would begin to well up, and so back to beer. One can see how beer could serve her purposes better than wine or spirits; it gave the needed sense of fullness and permitted her to prolong the feeling of goodness before it was again replaced by the hopeless passivity.

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[17] Sanford, N. The Freeing and the Acting Out of Impulses in Late Adolescence. In R. W. White (Ed.), The Study of Lives, New York: Atherton, 1963.

It is safe to say that the meaning of beer drinking for this young woman was quite different from that found in other cases. But there would appear to be nothing unique or pathological about her capacity and inclination to assign personal meaning to drinking, to give it symbolic value, and thus to use it as a means of expressing personality needs. This seems to be a general human tendency. The pathology in our case does not lie in the fact that infantile needs were expressed in drinking behavior; it has to do rather with the intensity of our subject's conflicts, and with the fact that these led to rigidity of personality--a state of affairs in which major strivings were unconscious, or were not in communication with the conscious ego. One might say that her way of managing her conflicts was not the worst that could have been contrived. She might have acted out her aggressive impulses and her dependence in overt behavior, with painful--or at least highly annoying--consequences for other people and serious consequences for herself.

Clinical studies of individuals in trouble, though they have so far been the major source of our knowledge about the relations of drinking to infantile needs and the unconscious process, are certainly not the only source of understanding of the place of drinking in the over-all functioning of a person. Much can be found out from research interviews that are focused on drinking and guided by theory. The following cases of two brothers, taken from Jones[18] show how different in meaning and implications may be the drinking which in two cases is classified as "heavy."

"They were raised in an immigrant household in an Italian section of a large city. The parents, born in Italy, spoke little English and clung to their Italian customs, including the drinking of wine with meals and on social occasions.

"The older of these boys conformed to the family background. He went from high school into a traditional Italian family business, and continues at age 45 to live next door to his parents. He married late, has two children still in grade school, and does not mention college among the goals he wishes for these children.

"The younger boy was brighter, more ambitious, and more aware of the differences between his background and that of his public school mates. Eventually he rejected his background. He went to college, became an entrepreneur, married before his older brother, moved from the Italian community of his origin and after several subsequent moves, each time to better neighborhoods, is now established in a superior residential section of a suburb. His children are preparing for college in private schools.

"The older man, like his parents, drinks wine on most occasions, though liquor is consumed in fair amounts. He says drinking makes him more lively. He enjoys drinking, likes the taste and doesn't 'drink for effect.'

"The younger brother drinks 'to be sociable' or 'because others are drinking,' while the older brother drinks 'to make social occasions more enjoyable.' The latter expresses pleasure in the situation, the other former lacks this emotional involvement. In addition the younger brother checks that he drinks 'when tense and nervous,' and feels 'relaxed' rather than 'lively' after drinking.

"The older brother drank 'fairly often' at home as a child, had liquor before graduation from high school. The younger brother hated wine as a child. Even the smell of it made him sick so that when the family cleaned up after a party he was excused from helping. Both men recall this experience in their separate interviews, the older with humor, the younger with some repugnance.

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[18] Jones, Mary C. Drinking and the Life Cycle. (In preparation).

"The older brother reported that his children have had wine with water at their grandparents' homes since an early age, and he believes that young people should be allowed to take a drink with friends before age 21. The younger man thinks that youth should postpone drinking until they have come of age, although his teenagers now have a cocktail at home occasionally with the family. Neither of these men is likely to drink unrestrainedly but the reasons which keep them in balance are quite different. The older man's drinking pattern, like that of his overall behavior, is integrated with his family role. He likes to drink for the taste and for the enjoyment it lends to a social occasion. There is no ambivalence about drinking or not drinking, no self-consciousness about limits to the amount or frequency, no concern about an occasional display of uninhibited impulse. He is tolerant toward the drinking of children in the grandparental tradition and of young people in groups of friends in the late teens.

"The younger brother shuns wine as the symbol of a background which marked him as 'different' among classmates and presented some handicaps to his educational and occupational ambitions. On the other hand, his drinking of beer and cocktails is symbolic of the higher social status he has achieved--he drinks because it is the thing to do in the circles to which he aspired and into which he has been admitted. But, in addition, he drinks because he needs to when he is tense and nervous in the new cultural milieu to which he has climbed and in the occupational roles which accompany his high income. But he is successful, he has made the grade, he knows how to control whim, pleasure, relaxation, and escapist tendencies. Drinking is a form of behavior engaged in without pleasure to display social status and, with discretion, to escape anxieties. This use of alcohol facilitates his social mobility and provides limited release from the tensions created by his social striving."

Implications for Future Research

Aware that the same drinking pattern, as described in terms of frequency and amount, may have meanings as different as those just considered, various researchers have, like ourselves, asked subjects to state in their questionnaires their reasons for drinking. When such "reasons" have been correlated with personality or social variables the results have not been satisfactory, there being fewer significant relationships than are obtained when the more objective frequency and amount categories are used. The trouble, of course, is that people are not very good reporters of their behavior in this area; their accounts are likely to be distorted by emotional factors such as the desire to make a good impression; also, reasons for drinking vary widely from one occasion to another and problem drinkers usually give so many reasons for drinking that quantitative analysis become very difficult.

Still, it seems clear that drinking is meaningfully related to personality functioning, and it ought to be possible to delineate some of this meaning by methods that are reasonably objective. The suggestion here is that further research be guided by a theoretically based typology that relates each pattern of drinking and abstaining to the purposes, functioning, and development of the individual and the group. One of us (Sanford, 1967)[19] has elsewhere outlined such a typology, according to which the drinking of a group or of an individual can be classified as primarily escapist, or facilitative, or integrative. In the case of an individual, integrative drinking is illustrative by the case of the older brother in the above excerpt from Jones (1968). The key notion in that "integration drinking has a place among outgoing personality processes and is thereby rendered more staisfying even as it favors the attainment of the persons larger purposes. It is not a necessity, does not interfere seriously with the satisfaction of other needs, has a place in the conscious self, is not engaged in automatically or against the will, and is not followed by regret." (p. 120)

Facilitative drinking is illustrated by the case of the younger brother in the above vignette. This is drinking that "facilitates non-destructive purposes of the individual without impeding integration of the personality." (p. 119)

Escapist drinking, as the term implies, is "the kind typically done to avoid the pains of frustration, anxiety, or emotional, and to gain by a short cut the gratification of impulses that cannot be admitted into the conscious ego." (p. 117) Patterns of abstaining may be classified in the same way.

This scheme is frankly normative and is intended to meet the requirement, stated above, of a scheme that supplies a basis for action. What is desirable is the integration of behavior and personality, both in those who abstain and in those who drink. This should be the basic aim of national alcohol policy and of alcohol education in schools and colleges.

It is our belief that such integration of behavior and personality occurs, in the normal course of events, in college. Seniors who abstain, although they are not great changers, are lower on Authoritarianism, and higher on Impulse Expression, Social Maturity and Developmental Status than freshmen abstainers, and we would say on the basis of clinical impressions that their abstinence is less militant or, as we should say, more integrative. Seniors, on the whole, drink more than freshmen but there is no evidence that their drinking is more problem-determined or problem-generating. On the contrary, we judge from their higher scores on SM, IE, and DS, and their lower scores on Authoritarianism, that they have made progress toward the integration of their personalities and that their drinking is thus more integrative. This is also what clinical impressions suggest.

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[19] Sanford, N. Where Colleges Fail. San Francisco: Jossey-Bass, 1967.

If, as has been suggested at various places in this Report, the college experience can be made to favor even more progress toward personality integration than has been observed in our subjects, we may look forward to a time when alcohol-related problems among college students will have become rare or mild.

The question is how can research test the formulations that have just been offered. We suggest that a beginning be made with clinical studies designed with a view of classifying drinkers and abstainers according to the scheme outlined above. Since the basis of the typology is the relationship between overt alcohol-related behavior and underlying disposition of personality, it seems clear that in order to classify subjects the researcher would need to know a great deal about their behavior as well as about their personalities. Ideally he would observe the individual's behavior with respect to alcohol in numerous varied situations, aiming at a full, and fully differentiated, picture of the behavior. He would not limit himself to such crude categories as "drink or not drink," "much or little," "spirits or light wine and beer," "in company or alone," though he might begin with these. He would look for more subtle variations in respect to taste and preference, reported experience, and behavior in varying situations under the influence of varying amount of alcohol. As patterns began to take shape the investigator might begin to formulate hypotheses concerning underlying dispositions of personality; and once he had hypothesized a particular disposition he might watch for behavioral manifestations of it; he might, indeed, begin to test hypotheses and his power to predict the individual's behavior in particular situations.

The investigator would be well advised, however, not to leap too quickly from behavior to underlying motive. His chances of making accurate inferences about personality would increase with the completeness of his picture of the subject's alcohol-related behavior. He would do well, therefore, to make a full survey not only of his subject's overt behavior, but of his knowledge, beliefs, attitudes, sentiments, and values in the whole area of drinking, drinks, drugs, drinkers, intoxication, alcoholism, abstaining, and so on.

If this were done, and if at the same time there were available a substantial amount of clinical material on the subject's life history and personality functioning it should be possible for two or more judges to agree on the proper classifications of their subjects. This done, the researcher would be in a good position to investigate the determinants, or antecedents, of the different types of drinkers and abstainers, and to experiment with different means of modifying the less adaptive patterns.

Chapter XI

STUDENTS WHO SEEK PSYCHIATRIC HELP

Ving Ellis, M.D.*

The Problem

Of the 3,474 students who entered the University of California at Berkeley in the fall of 1961 as undergraduate freshmen, 493 availed themselves of the services of the Psychiatric Clinic at the Student Health Service, Cowell Memorial Hospital, during the four undergraduate years, ending in June 1965.

An attempt will be made to describe, analyze and comment on the emotional problems in living encountered by these students in the University environment during that time, as well as the therapeutic interactions, outcomes and possible significances of such an enterprise for the students, the University, and the larger community.

The Setting

Students with major or minor emotional problems avail themselves of many sources of help in and around the University in their attempts to cope with or solve them: friends, roommates, casual acquaintances, wives, sweethearts, prostitutes, bartenders, ministers, professors, counsellors and psychotherapists, among others. These are all present in sufficient quantity in the University and local community. In addition, the University makes available (as part of its services) a psychiatric clinic as part of the Student Health Service, which is essentially restricted to the use of students and financed by a share of the student's incidental fee.

The Psychiatric Clinic is housed in one wing of a moderately large general hospital, the Cowell Memorial Hospital, which has a capacity of approximately 130 beds, and its Psychiatric Clinic is

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adequately staffed in the traditional disciplines of Psychiatry, Psychology, and Psychiatric Social Work, from which it draws its administrators and psychotherapists.

There are also beds available on the inpatient service of the hospital if it is felt that a student could benefit from brief hospitalization. None of these beds are reserved especially as "psychiatric" nor are they isolated in a "psychiatric" ward. All psychiatric services are voluntary, at the request of the student.

The Psychiatric Clinic has been practicing an "open door" policy for many years. That is, people are seen promptly instead of being put on a waiting list, consonant with the notion that long delays between application and professional help might make such help meaningless or irrelevant. Scheduling is flexible, depending on the needs of the student and the demands on the therapists' time, and intake is "non-segregated" in the sense that intake interviews are conducted by staff members of all the disciplines and students continue with their initial interviewers, unless there is a specific reason for transferring to another psychotherapist. Therapists are of many "schools," but the general orientation over the years held in common by all therapists has tended to be an "ego-oriented" psychotherapy, focused on adaptation and integration rather than adjustment and conformity to the expectation of others. The therapist is as much as is humanly possible the sole agent of the student (by whom he is paid, in this prepaid medical service of which he is a part).

The Data

When a student applies to the Psychiatric Clinic for help, he is requested to fill out an application form, consisting of a face sheet for family and personal information as well as an attached sheet on which he is asked to respond to the following two questions:

1. What prompts you to come to the Clinic at this time? Describe problems.

2. Recent upsetting occurrences.

Data from this application are utilized in the analysis of the total sample of 493 students presented here. In addition, 22 of the students in this group were subjects in a longitudinal study, "The Student Development Study," involved with the growth and development of students during their four undergraduate years, for whom there exists sequential interview material during the entire time they were in school. Also, for 265 of these students (120 males and 145 females) there are data from a battery of tests administered when these students entered school in 1961. For 91 students (46 males and 45 females) there are test data on entry in 1961, and on leaving in 1965.

Sources of Referral

Entering students learn about the Psychiatric Clinic in a variety of ways. There is a brief mention of the service in the general catalogue and usually, every semester, there has been an article about the Clinic and its services in the student newspaper, The Daily Californian. Probably in most instances it is by word of mouth among the students themselves that the word gets around, although this is conjecture. A breakbown of the total sample of the 493 students over the four years indicates the following distribution of sources of referral:

Table 1

Distribution of Sources of Referral

Source	Number	Percent
Self-Referred	335	68
Student Health Service	43	8
Counsellors and Advisors, (Academic)	32	6
Deans	27	5
Other students	22	4
M.D.'s in the community	11	2
Parents	8	2
Other relatives	4	1
House	2	<1
Police	1	<1
Not reported	8	2
	493	

It is apparent that students refer themselves in much greater numbers than any other source of referral, with the Student Health Service a rather low second. Academic counsellors and advisors, as well as Deans, are not numerically very much above the category of "other students" as a source of referral. And even the enlightened Campus and Berkeley Police apparently do not feel that the problems that bring them into contact with students are emotional, considering their rates of referral.

Sex and Class

A distribution of students by sex indicates that 252 men and 241 women used the psychiatric services.[1] A breakdown by class as well as sex makes utilization of the Clinic through the four years more apparent.

Table 2

Distribution by Class and Sex

	Men	Percent	Women	Percent
Freshman	75	15	93	19
Sophomore	72	15	74	15
Junior	60	12	41	8
Senior	33	7	28	6
Unknown	12	2	5	1
Total	252	51	241	49

Although in absolute numbers more men used the services of the Clinic than did women (252 to 241), the percentage of women who used the Clinic was greater, since 43% of the students of this class were women and 57% were men. The women tended to use the service more in the freshman year and were about equal with the men in the sophomore year. In the last two undergraduate years, however, the men in this class used the Clinic more. A confirming datum is the distributions of the total clinic population by sex in the fall semester of 1960. Out of 775 patients, 409 (53%) were male and 366 (47%) were female.

Marital Status

Among the applicants, 97% were single when they first applied to the Psychiatric Clinic. Only twelve students were married at the time they first applied to the Clinic for help.

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[1] Distribution by sex of students in the general population at the University of this class is: entering men, 1977 (57%); entering women, 1497 (43%).

Age Distribution

Age distribution showed a spread from 16 years (.61%) to 31 years (.20%). Nineteen-year-olds came most frequently (31%), with eighteen-year-olds (27%) and twenty-year-olds (18%) next. The remainder of the students were mostly bunched between the ages of 17 and 23. This is consistent with a check of the distribution by age for the total clinic population in the fall semester 1960.

Place of Residence

The majority of the students listed California as their place of residence. The distribution was as follows:

	Patient Sample	Whole Class[2]
California	395 (80%)	3120 (90%)
U. S. (outside Calif.)	51 (10%)	291 (8%)
Outside U. S.	12 (2%)	63 (2%)
Unlisted	35 (7%)	
	493	3474

From those within the United States, the frequency distribution by state (other than California) was as follows:

	Patient Sample	Whole Class[2]
New York	17 (3.4%)	47 (1.3%)
Washington	4 (0.8%)	16 (0.4%)
Colorado	4 (0.8%)	14 (0.4%)
Arizona	3 (0.6%)	13 (0.3%)
Massachusetts	2 (0.4%)	15 (0.4%)
New Jersey	2 (0.4%)	8 (0.2%)
New Mexico	2 (0.4%)	7 (0.2%)
Other	17 (3.4%)	171 (4.9%)
	51	291

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[2] Figures supplied by the Office of Institutional Research, University of California.

Parents

Because parents are (almost) always inevitably involved in the emotional disturbances of their children, information of a general nature might help to throw light on the problems under consideration. Specific details will be considered where individual students are discussed, as they appear relevant.

Age Distribution: Fathers and Mothers

Most fathers of these students fell in the age range of 40-57 years. The full range was from 36 years to 73 years with one (.2%) at each extreme. Thirty-two of the fathers (6%) were deceased.

The age range of the mothers was from 34 years to 62 years. The largest number fell between the ages of 40 and 53 (about 80%). Seventeen of the mothers (3%) were deceased.

The age distributions of Berkeley comparison samples in our study show very similar patterns--with the one exception that a higher percentage of the fathers of the Berkeley women in our comparison sample are deceased. A few inferences can be made. Fathers died at about twice the rate of mothers (6% to 3%). Mothers' and fathers' ages are fairly equal and it is evident that marriages were not being consumated quite as early about 20 years ago as they seem to be in recent years, at least not in the parents of these college students.

Parents' Occupations[3]

Sociologists and other social scientists have frequently remarked on the significance of fathers' status, as reflected by occupations, for the emotional well-being of their children. The distribution of fathers' occupation for these students are as follows:

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[3] See Appendix A for description of Occupational Code.

Table 3

Distribution by Fathers' Occupation

Fathers' Occupation	Males	%	Females	%
Retired or Disabled	24	10	27	12
Clerical and Related Workers	3	1	4	2
Craftsmen, Foremen, etc.	29	12	19	8
Laborers	7	3	2	1
Operatives	1	<1	2	1
Professional, Technical	86	34	96	40
Proprietors, Managers	49	19	45	19
Sales Workers	34	14	25	10
Service Workers except Domestic	2	1	1	<1
No response	17	7	20	8

The highest number of fathers' occupations fall in the category of "professional, technical," followed by "proprietor, managers" and "sales workers" in that order. "Craftsmen, foremen" fall slightly behind "retired or disabled" in frequency.

A comparison of the three highest and two additional categories of patients fathers' occupations with those of the general population of their classmates at Berkeley (and the same class at Stanford) is as follows:

Table 4

Distribution of Fathers' Occupation by Sex of Student in Percent

Fathers' Occupation	Berkeley Patients		Berkeley Students[4]		Stanford Students[4]	
	Male	Female	Male	Female	Male	Female
Professional, Technical	34	40	29	36	33	42
Proprietors, Managers	19	19	17	14	20	17
Sales Workers	14	10	8	5	7	5
Clerical & related fields	1	2	5	2	3	1
Laborers	3	1	6	7	3	1

As far as fathers' occupations are concerned, the Berkeley patients seem to resemble more closely the Stanford students than they do the Berkeley students; except in the category of sales workers.

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[4] Based on the Senior Questionnaire administered by the Student Development Study.

Although mothers' occupations have not caused a great stir among writers in the social sciences, except to note that more and more of the mothers are entering the labor market (with forebodings or cheers about its effects on the emotional well-being of children, depending on the special interests of the writer), a presentation of a distribution of mothers' occupations might reveal a trend.

Table 5

Distribution by Mothers' Occupation

	Patients		Berkeley Students	Stanford Students
Mothers' Occupation	Number	Percent	Percent	Percent
Retired or Disabled	4	1		
Housewife	204	41	50	59
Clerical and Related	73	14	18	13
Craftsmen, Foremen, etc.	2	<1		
Laborers	1	<1		
Operators	3	1		
Professional, Technical	95	19	20	20
Proprietors, Managers	15	3		
Sales Workers	13	3	4	3
Service Workers except Domestic	9	2		
No response	58	12		

Note that mothers have one more category of employment than do fathers, which accounts for the largest number in all categories; that is, "housewife." On the other hand, the second largest category for mothers (the largest for fathers) is the "professional, technical," which accounts for 19% of the mothers, slightly more than half of fathers in the same category.

Siblings

There have been so many hypotheses about the effects of siblings and their rivalries and positions on the growth, development and intelligence (among other things) on children that to attempt to list or evaluate them here at this time would hamper and intrude on the descriptive task. Their distribution follows.

Table 6

Number of Siblings

Patients Number	Patients Percent	Number of Siblings	Berkeley Students Number (Senior Questionnaire samples)	Berkeley Students Percent (Senior Questionnaire samples)
80	16	0	57	10
197	40	1	186	34
136	28	2	148	27
46	9	3	87	16
20	4	4	32	6
7	1	5	17	3
3	1	6	5	1
1	1	7	4	1
1	1	8+	2	1
Not reporting:				
2	1		17	3
493			555	

Comparing students (1) with no siblings, (2) with one sibling, and (3) with two or more siblings: $X^2 = 10.89$, df = 2, p = .01.

Note that the students who came to the Clinic (from this class) came more frequently from homes where they are the only children or where there is only one additional child than is true for the rest of the population, at least as presented in our comparison sample.[5]

Majors

With 28 students (6%) not reporting, the following is the distribution of students by college. (See Table 7.)

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[5] We also computed ordinal position and found that in the patient sample, 63% of the men and 64% of the women were first-born (including only children), while 57% of the men and women in our Senior Questionnaire sample were. This difference is statistically significant ($X^2 = 4.02$, df = 1, p = .05). Studies summarized by William D. Altus. Birth Order and Its Sequelae, Science, 1966, 151, 44-49, indicate that first-born are present in greater proportions in the brighter segments of the population. They also seem more achievement-oriented and have a greater "conscience" development. (See Footnote 8.)

Table 7

Distribution by College

College	Patients (N=493) Number	Patients Percent	Entering Freshmen Fall 1961 (N=3474) Number Male	Number Female	Total	Percent
Letters & Science	384	78	1,283	1,459	2,742	79
Engineering	36	7	472	4	476	14
Environmental Design	23	5	110	14	124	4
Chemistry	10	2	101	14	115	3
Business Administration	12	2	---	--	---	--
Agriculture	5	1	11	6	17	1
No data	23	5				

All colleges except the College of Engineering are about equally represented in the student and patient populations. Engineering students seem to underuse the Psychiatric Clinic.

There are 66 different majors listed by the students who came to the Clinic. A distribution of majors having 7 or more students follows.

Table 8

Distribution of Students by Major

Major	Patients Number	Patients Percent	All Juniors, 1963[6] N = 4806 (2808 men; 1998 women) Number	Percent
Psychology	39	8	248	5
Engineering	35	7	520	11
English	33	7	372	8
Political Science	30	6	356	7
History	27	5	363	8
Architecture	21	4	0	0
Sociology	16	3	128	3
Physics	15	3	136	3
Chemistry	13	3	36	1
Mathematics	12	2	145	3
Business Administration	12	2	283	6
Biological Science	12	2	122	3
Pre-Med	11	2	0	0

(Cont. on page 520.)

(Table 8, continued)
Distribution of Students by Major

Major	Patients Number	Patients Percent	All Juniors, 1963[6] Number	All Juniors, 1963[6] Percent
French	11	2	100	2
Social Science	10	2	110	2
Zoology	10	2	167	3
Anthropology	8	2	136	3
Humanities	8	2	44	1
Philosophy	7	1	44	1
Other	100	20	1,496	31
Not reporting	73	15		
	493		4,806	

Because of the high percentage of patients (15%) who do not report their major, no strict comparisons can be made. But the figures seem to counter a frequently held belief that students in the natural sciences utilize psychiatric clinics less than students in the Humanities. (But engineers again seem to use the Clinic in lesser proportions.) The social science majors, on the other hand, do not seem to make use of the clinic beyond their proportions in the population. Business Administration and history majors seem to underuse the clinic.

Work

Of the students reporting in this category, 132 (26.77%) responded that they did some work, whereas 186 (37.73%) said they did no work at all. There were 175 (35.5%) students who did not respond to this category.

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[6] Figures supplied by the Office of Institutional Research, University of California. The Junior, 1963, figures include not only students who entered in the fall of 1961 but earlier entrants and transfers who had junior status.

Other Financial Resources

Other Financial Resources	Number	Percent
Did not report	180	36.51
Parents	214	43.41
Summer work	29	5.88
Scholarships	28	5.68
Savings	15	3.04
Loans	7	1.42
Stocks	4	.81
Trust Funds	3	.61
Life Insurance	1	.20
Other	12	2.43

It is apparent that parents bear the main burden of supporting these students in school. Only a very few of them support themselves at least in part from savings or summer work.

Grades

Grade-point averages upon application to the Clinic (as reported by students) were as follows.

Table 9

Distribution by Grade Point Average

Grade-Point Average	Number	Percent
Not reporting	104	21
1.9 or below	52	11
2.9 to 2.0	233	47
4.0 to 3.0	104	21

At least for the students here under study, the notion sometimes held that students who use psychiatric clinics are the best students academically does not seem to be born out.[7] At the same time, their performance is not lower than that of their peers.

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[7] The cumulative senior GPA for patients on the basis of the Registrar's records were: Men patients 2.62 (N=125), women patients 2.65 (N=122). In two random senior samples from the whole class the GPA for the men was 2.64 (N=400), for the women 2.65 (N=400).

In aptitude and intelligence, the patients, however, are superior. The patients' verbal and mathematical Scholastic Aptitude Test scores are significantly ($p \leqq .01$) higher than those of their peers.[8]

Moreover, the patients obtain significantly higher scores than non-patients on cognitive and other personality scales (see Tables 17 and 18).

Previous Counseling and Psychotherapy

One hundred and thirty-seven (31.85%) students acknowledged having had previous counseling.

Eighty-three students (16.84%) acknowledged previous psychotherapy.

"Drop-Outs"

Of the 493 students who came to the Psychiatric Clinic, 321 "dropped out" of school.

In a separate study of "drop-outs," using Student Developmental Study data,[9] it was found that during the four-year period following initial admission to the University, a total of approximately 59% of the class interrupted their stay at Berkeley, and during that four-year period 9% returned, leaving about 50% of the original group who entered the University still registered at the end of the fourth year.

Considering the present Clinic sample of 493 students, of the 321 who interrupted their stay at Berkeley, 77 (about 24%) returned to the Berkeley campus. If anything can be said in comparing the "Clinic group" with the whole class, it might be that although more people who come to the Psychiatric Clinic tend to drop out of school (65% vs. 59%), a considerably greater proportion of them return to campus than do those who do not come to the Clinic.

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[8]

SAT	Men Patients (N=220)	Berkeley Male Students (N=1857)	Women Patients (N=211)	Berkeley Female Students (N-1494)
Verbal	584 (91)	584 (93)	577 (86)	544 (86)
Mathematical	662 (84)	606 (88)	545 (85)	519 (88)

[9] Suczek, Robert F., Ph.D., and Alfert, Elizabeth, Ph.D. Personality Characteristics of College Drop-Outs. Department of Psychiatry, Student Health Service, University of California, Berkeley, 1966.

It must be stressed that very few students in either group had to leave as a result of academic failure. This has been universally low (about 5-10%) during all the years that records have been kept at Berkeley.

Religion

Distribution by religion was as follows.

Table 10

Religion	Number	Percent
Not reporting	202	41
Protestant	104	20
Jewish	82	17
None	53	11
Catholic	39	8
Agnostic	4	1

Entering Complaints

Of particular interest and concern are the reasons students give for coming to the Clinic for help. Their responses to the question "What prompted you to come to the Clinic at this time?", fall into (at least) 51 distinct categories. In some instances students will complain of difficulties in two or more categories. A distribution by frequency of categories of complaints is as follows.

Table 11

Presenting Problems: 1st Series[10] (493 students)

Problem	Number	Percent
Depression	91	18
Unable to do schoolwork	80	16
Family problems	32	6
Nervous, tense	31	6
Unreported	22	4
Too personal to state	16	3
Confusion	15	3
Psychosomatic	14	3
Strong anxiety	13	3

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[10] Some students return for a second, and up to a fifth, series of therapeutic interviews during their college years.

(Table 11, continued from page 523)

Problem	Number	Percent
Outside request	12	2
Social relation problems	12	2
Concern about others	12	2
Want excuse to "drop-out"	11	2
Concern about grades	9	2
Sexual difficulties (unmarried)	9	2
"Phobias"	9	2
Inpatient (for observation)	9	2
Desire to leave school	8	2
Obesity	7	1
Self-destructive impulses	7	1
Sleeping difficulties	6	1
Shyness, inhibition	6	1
Lack of confidence	6	1
Obsessions, compulsions	5	1
Indecision	5	1
Loneliness	4	1
Feelings of isolation	4	1
Other	38	8

One hundred and twelve students were seen for a second series of therapy interviews, 30 for a third, five for a fourth, and one for a fifth.

The most common complaints made by students (usually stated together) were "Depression" and "Unable to do school work" (34%). The next most frequent complaint was "Family problems" (6%). An attempt will be made to explain these very common findings in any student psychiatric clinic later in this paper.

Inpatients

There were 41 students from this group who were admitted to the inpatient service during the four years. The distribution in terms of the number of days spent in the hospital is as follows.

Table 12

Distribution by Inpatient Days in Hospital

Number of Patients	Number of Days
10	1
6	2
5	3
3	4 - 7
7	8 - 9
4	10 - 15
6	22 - 34

Peak utilization for this group appears to be at 2-3 days and 8-9 days. Students who were able to continued to go to classes and returned to the hospital at the end of the day, with permission of their doctors.

Improvement

All studies dealing with emotional disturbances and their treatment are eventually faced with coming to terms with the notion of improvement or "cure." In present "cases" the researcher, who had fourteen years of experience in psychotherapy at this Student Health Center, used as the criterion of improvement the following: "If in the opinion of the rater (following careful examination of the students' record) he decided that the student and/or the psychotherapist felt that the interaction was of some benefit to the student the outcome was considered positive and the student improved. If there were no such evidence the outcome would be considered negative.[11] In the latter case there is, of course, always the possibility that something might have occurred which had been of benefit to the student but had not been recorded by the therapist.

In addition to the author who rated every record, two other psychotherapists with even longer histories of experience with college students in psychotherapy rated every tenth patient record (N=50) in order to establish reliability of the criterion of ratings. Reliability was found to be very high.

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[11] The author agreed in his ratings with the other two raters in 82% and 86% of his judgments. The other two agreed with each other in 80% of the judgments. All three agreed with each other in 74% of the judgments.

A breakdown of benefited vs. unbenefited students for all five series of therapeutic interviews is as follows.

Table 13

Distribution by Number of Admissions

Interview Series	Number of Students	Benefited	Not Benefited
1	493	205 (42%)	285 (58%)
2	112	50 (45%)	62 (55%)
3	30	12 (40%)	18 (60%)
4	5	2 (40%)	3 (60%)
5	1	0	1
	641	269 (43%)	359 (57%)

Percent "benefited" vs. percent "not benefited" for all admission series are almost identical with those of the first series: 43% for all admissions compared with 42% for the first series in the "benefited" column, and 57% for all admissions compared with 58% for the first series in the "not benefited" column.

If we examine the number of hours that students were seen and compare these to "benefited" and "not benefited" status (for both males and females) it becomes quite clear that students who are seen for only one hour fall most heavily in the "not benefited" column. That is, for the first series where 144 students (male and female combined) were seen for one hour, ten were judged "benefited" and 134 were judged "not benefited."

Table 14

Number of Hours Seen During First Series: Males (N=252)

	Benefited Males		Not Benefited Males	
Hours Seen	Freq.	Percent	Freq.	Percent
1	7	7	71	47
2	16	16	37	25
3	15	15	10	7
4	11	11	11	8
5	8	8	3	2
6	9	9	2	1
7	8	8	5	3
8	6	6	5	3
9	5	5	1	1
10	4	4	2	1
11 - 15	5	5	1	1
18 - 44	7	7	2	1

Table 15

Number of Hours Seen During First Series: Females (N=241)

	Benefited Females		Not Benefited Females	
Hours Seen	Freq.	Percent	Freq.	Percent
1	3	3	63	48
2	12	12	25	19
3	21	20	8	6
4	11	11	7	5
5	12	12	3	2
6	11	11	7	5
7	6	6	2	2
8	7	7	1	1
9	5	5	4	3
10	2	2	3	2
11 - 15	9	9	5	4
16 - 63	5	5	4	3

If all contacts which are terminated after one hour are omitted from calculations (for first series in this example), the percent of students "benefited" goes up from 42 to 58.

Why students come for only one hour and then stop is a matter of conjecture. Some probably get what they came for in that period of time. In most cases, the student has made a second appointment but did not keep it and did not call in to give a reason for failure to keep the appointment. In some cases it is clear from the records that students felt they had made a mistake coming to the Clinic and did not wish to continue.

"Benefited" rates for both men and women increase rapidly after the first hour and only start to fall off by the ninth hour, and then slowly. "Not benefited" men and women fall-off tends to take place at about the third hour. For example, 47% of the males are not benefited at the end of one hour, 22% are not benefited when seen for two hours, and only 7% are not benefited if seen for ten hours. Similarly, with females, 48% are not benefited at the end of one hour, 19% at the end of two hours, and only 6% are not benefited at the end of three hours. The figures as noted seem to indicate that students seen for from three to ten hours appear to have the best possibilities of benefit in psychotherapy in this Clinic.

If one now examines a breakdown of diagnoses for these students it is apparent that the highest frequency of undiagnosed students fall in the area of those seen for the least number of hours. For unbenefited males, those given a "Deferred" diagnosis amount to

49%, and for unbenefited females the "Deferred" diagnosis is 48%--an almost identical percentage as that for students seen for only one hour.

Table 16

Distribution of Diagnoses

Diagnostic Classification	Males (N=252) Benefited Freq.	Males (N=252) Benefited %	Males Not Benefited Freq.	Males Not Benefited %	Females (N=241) Benefited Freq.	Females (N=241) Benefited %	Females Not Benefited Freq.	Females Not Benefited %
Deferred	14	14	74	49	13	13	63	48
Anxiety Reaction	9	9	4	3	5	5	5	4
Dissociative Reaction					1	1		
Conversion Reaction					4	4	2	2
Phobic Reaction			1	1	2	2		
Obsessive-Compulsive Reaction	4	4	2	1	1	1	2	2
Depressive Reaction	8	8	5	3	7	7	5	4
Schizophrenic Reaction - Simple Type -			1	1				
Schizophrenic Reaction - Paranoid Type -	1	1						
Schizophrenic Reaction -Acute Undifferentiated Type			1	1				
Paranoia					1	1		
Personality Pattern Disturbance					1	1		
Inadequate Personality	1	1						
Schizoid Personality	8	8	9	6			8	6
Cyclothymic Personality			1	1	2	2		
Paranoid Personality							1	1
Emotionally Unstable Personality					1	1	3	2
Passive-Aggressive Personality	17	17	19	13	19	18	7	5
Compulsive Personality	8	8	5	3	3	3	1	1
Sociopathic Personality			3	2				
Antisocial Reaction	1	1						
Dyssocial Reaction	1	1						
Gross Stress Reaction					1	1		
Adult Situational Reaction	2	2	1	1	1	1		
Adjustment Reaction of Childhood					1	1		
Adjustment Reaction of Adolescence	26	26	19	13	39	38	27	20

After "Deferred" the next most frequent category for both men and women is "Adjustment Reaction of Adolescence," followed by "Passive-Aggressive Personality." It is of interest to note that 34% of the complaints that students make on entry to the Clinic fall into the category of "depression" and "inability to do school work," while the diagnosis "Depressive Reaction" makes up only 22% of all diagnoses. This may be due to the fact that for this age group, depression tends to come and go relatively quickly and may not be part of the clinical picture shortly after, or at the time of being seen by the psychotherapist. No therapist listed "Learning Disturbance" as a diagnosis, although complaints in this area are quite high for students of both sexes.

To say that 34% of all intake complaints fall in the categories of depression or inability to do school work does not convey the kind of desperate flavor that the verbatim complaints do. The following examples may convey some of the poignancy and despair of such presenting problems.

> "Can't study, or at least when I think I am studying all I am doing is putting in time. I want to think about doing nothing. Just plain tired of school but yet don't want to stop. Difficulty in getting to sleep. Have been recently using drugs to sleep.. Usually in the latter part of the week. A general feeling of uselessness that what I am doing nobody cares about and I am just about to quit caring. Depression, and only thinking about sleeping but can't seem to sleep. I just can't go on like this. I feel miserable and I am getting very disagreeable and upset at the most insignificant incidents. Anything in the way of quizzes or tests usually upsets me for the whole day. Probably the whole idea of my being here is upsetting. I don't know or for that matter care, but then I do care in a way."

> "I have a lack of interest in school, life, etc. I seem to be a spectator to everything. I find it very difficult to force myself to study because of this lack of interest. Whenever an important desision comes up I really have a tough time knowing what to do and many times I am dissatisfied with the decisions taken. I have periods of extreme depression. Some days I feel fine and other days I feel like everything goes wrong and nothing will ever get better."

Virtually none of the students who complain in this manner, either of depression or inability to do school work, are failing in their academic tasks, nor do they come to the Clinic to get a medical excuse to drop out of school. The latter type of request is rare. The above categories of complaints are not unfamiliar to their middle forties and early fifties. The span of age of the students who struggle and suffer with the problems reported here is between 17 and 21.

The next most frequent category of complaint is "Family Problems" (6%), followed by the category "Nervous, tense" (6%). Typical complaints about family problems are represented in the following examples.

> "My father and mother are separated and my mother and sister just moved from _______ to __________ renting our house in __________. My father told me he is going to cancel the lease which my mother made and then the renters will be able to sue my mother. I don't know whether I should tell her what is happening or keep out of it entirely. Also, I am depressed."

> "I find that I am bothered most of the time with a problem and spend very little time studying. I had a miserable childhood with my father and thought if I could have a happy relationship with a girl at present, then everything would be all right. But as I have too slowly made myself realize, I cannot have a happy relationship with a girl (or anyone) until I somehow resolve this overshadowing problem. I thought I would come see a psychiatrist who is supposed to know, and not innocent girls who just want to be happy and secure."

In our sample, concern about grades is about on a par with complaints about sexual difficulties, nine in each category, 2% for each.

Personality Characteristics of Benefited and Not Benefited Patients

People who seek the help of the psychiatric service seem to be different from the rest of the student population (Tables 17 and 18). Benefited and not benefited patients alike are different from their peers both at the start and end of college. The users of the psychiatric service score significantly higher as freshmen on scales measuring such personality characteristics as flexibility, autonomy, imaginativeness, aesthetic responsiveness, and they score lower on authoritarianism. Interestingly enough, there is no significant difference in their scores on a scale (Schizoid Functioning) measuring bizarreness of thinking and social alienation, with the exception of the not benefited women patients for whom as freshmen there is a difference at the .10 level of confidence. The differences between patients and non-patients persist into their senior year.

Table 17A

Personality Inventory Scores of Berkeley Freshmen and of Berkeley Patients as Freshmen (MALES)

	I Berkeley Freshmen (N=1026) Mean	I (SD)	II Benefited Patients Freshmen (N=51) Mean	II (SD)	III Not Benefited Patients Freshmen (N=71) Mean	III (SD)	t tests Comparing the Difference Between the Means of the Following Groups I & II	I & III	II & III
Social Maturity	50	(10)	54	(11)	56	(9)	2.77^a	4.92^a	1.09
Impulse Expression	50	(10)	53	(10)	54	(9)	2.09^b	3.28^a	0.57
Schizoid Functioning	50	(10)	52	(11)	52	(10)	1.39	1.63	0.00
Masculinity-Femininity	50	(10)	47	(11)	45	(12)	2.08^b	4.01^a	0.93
Estheticism	50	(10)	54	(11)	57	(10)	2.77^a	5.70^a	1.55
Developmental Status	50	(10)	56	(11)	55	(10)	4.16^a	4.07^a	0.52
Authoritarianism	116	(26)	108	(26)	105	(28)	2.14^b	3.43^a	0.60
Ethnocentrism	56	(21)	54	(21)	52	(22)	0.66	1.53	0.50

---

[a] significant at the .01 level

[b] significant at the .05 level

[c] significant at the .10 level

Table 17B

Personality Inventory Scores of Berkeley Freshmen and of Berkeley Patients as Freshmen (FEMALES)

	I Berkeley Freshmen (N=852)		II Benefited Patients Freshmen (N=58)		III Not Benefited Patients Freshmen (N=83)		t tests Comparing the Difference Between the Means of the Following Groups		
	Mean	(SD)	Mean	(SD)	Mean	(SD)	I & II	I & III	II & III
Social Maturity	50	(10)	54	(8)	56	(10)	2.98[a]	5.21[a]	1.26
Impulse Expression	50	(10)	53	(8)	55	(9)	2.23[b]	4.38[a]	1.35
Schizoid Functioning	50	(10)	52	(9)	52	(10)	1.48	1.74[c]	0.00
Masculinity-Femininity	50	(10)	49	(11)	49	(10)	0.73	0.87	0.00
Estheticism	50	(10)	53	(10)	55	(10)	2.21[b]	4.34[a]	1.16
Developmental Status	50	(10)	54	(10)	56	(10)	2.94[a]	5.21[a]	1.16
Authoritarianism	113	(27)	108	(25)	97	(28)	1.37	5.13[a]	2.38[b]
Ethnocentrism	50	(18)	51	(22)	42	(19)	0.40	3.84[a]	2.57[b]

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[a] significant at the .01 level

[b] significant at the .05 level

[c] significant at the .10 level

Table 18A

Personality Inventory Scores of Berkeley Seniors and of Berkeley Patients as Freshmen and Seniors (MALES)

	I		II		III		IV		V		t tests		
	Berkeley Seniors (N=286)		Benefited Patients				Not Benefited Patients				Comparing the Difference Between the Means of the Following Groups		
			Freshmen (N=18)^{1,2}		Seniors (N=18)^{2}		Freshmen (N=24)^{1}		Seniors (N=24)				
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	I & III	I & V	III & V
Social Maturity	57	(11)	55	(12)	63	(8)	54	(11)	61	(11)	2.21^{b}	1.71^{c}	0.59
Impulse Expression	52	(11)	51	(11)	56	(12)	52	(9)	57	(11)	1.61	2.13	0.18
Schizoid Functioning	47	(11)	52	(11)	50	(10)	52	(11)	49	(12)	1.06	0.85	0.23
Masculinity-Femininity	47	(13)	50	(9)	43	(10)	45	(10)	40	(13)	1.30	2.53^{b}	0.79
Estheticism	52	(12)	56	(11)	58	(11)	57	(11)	59	(12)	1.94^{c}	2.74^{a}	0.36
Developmental Status	58	(11)	54	(11)	64	(9)	53	(11)	62	(10)	2.07^{b}	1.72^{c}	0.49
Authoritarianism	96	(26)	108	(29)	83	(21)	108	(31)	96	(32)	2.23^{b}	0.00	1.55
Ethnocentrism	44	(18)	52	(22)	36	(14)	51	(23)	47	(22)	1.89^{c}	0.77	1.86^{c}

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[1] These are the freshmen for whom we have both freshman and senior scores.

[2] For the Authoritarianism and Ethnocentrism scores of the Benefited Patients, N = 21.

[a] Significant at .01 level
[b] Significant at .05 level
[c] Significant at .10 level

Table 18B

Personality Inventory Scores of Berkeley Seniors and of Berkeley Patients as Freshmen and Seniors (FEMALES)

	I		II		III		IV		V		t tests		
	Berkeley Seniors (N=265)		Benefited Patients				Not Benefited Patients				Comparing the Difference Between the Means of the Following Groups		
			Freshmen (N=16)[1]		Seniors (N=16)		Freshmen (N=30)[1]		Seniors (N=30)				
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	I & III	I & V	III & V
Social Maturity	58	(10)	57	(7)	67	(5)	57	(11)	62	(11)	3.56[a]	2.05[b]	1.69
Impulse Expression	52	(11)	53	(8)	59	(7)	55	(7)	58	(9)	2.51[b]	2.87[a]	0.38
Schizoid Functioning	46	(11)	51	(8)	48	(7)	53	(7)	50	(11)	0.72	1.88[c]	0.65
Masculinity-Femininity	48	(10)	48	(11)	49	(6)	47	(9)	44	(12)	0.39	2.03[b]	1.53
Estheticism	53	(10)	54	(9)	59	(8)	54	(10)	59	(9)	2.35[b]	3.14[a]	0.00
Developmental Status	59	(11)	56	(8)	69	(6)	56	(9)	65	(11)	3.59[a]	2.82[a]	1.32
Authoritarianism	89	(26)	101	(21)	70	(16)	97	(29)	78	(29)	2.88[b]	2.16[b]	1.00
Ethnocentrism	39	(16)	47	(18)	30	(10)	40	(14)	35	(16)	2.22[b]	1.29	1.12

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[1] See footnote 1, Table 18A.

[a] Significant at .01 level
[b] Significant at .05 level
[c] Significant at .10 level

One may interpret the differences in the freshmen and senior scores to mean that people who seek out the psychiatric service possess a higher degree of psychological awareness and flexibility; they seem more able to admit that they have problems and to face up to them. (Some and perhaps many of the non-patients may be characterized not so much by absence of trouble, but by tendencies to deny problems and to leave them unchallenged and unexamined, at the price of greater rigidity and emotional flatness.)

It is worth noting that the benefited patients register a stronger decrease than the not benefited patients in their scores on authoritarianism and ethnocentrism. The difference does not quite reach statistical significance, but it occurs in both men and women.

Counseling Center Data

Another helping service available to students on campus other than the Psychiatric Clinic is the Counseling Center.

Of the 160 students followed in the Student Development Study, 60 students were seen by the Counseling Center and 22 were seen by the Psychiatric Clinic, a ratio of almost three-to-one.

Of the 60 students seen in the Counseling Center, 28 were females and 32 were males. A breakdown by class showed 35 freshmen, 17 sophomores, four juniors, and four seniors.

The number of hours each of these students was seen in the Counseling Center was as follows.

Table 19

Distribution by Hours Seen in Counseling Center

Hours Seen	Number of Students
1	14 (23%)
2	19 (32%)
3	10 (17%)
4	7 (12%)
5 - 10	10 (17%)

Outcomes

Criteria here were the same as those used in judging improvement in students who had utilized the Psychiatric Clinic.

Table 20

Counselees Benefited and Not Benefited

Hours Seen	Benefited	Not Benefited
1	6	8
2	15	4
3	8	2
4	6	1
5 - 10	5	5
	40 (67%)	20 (33%)

Outcomes in the Counseling Center appear considerably better than in the Psychiatric Clinic. However, a consideration of the reasons given by students coming to the Counseling Center in comparison with those given by students coming to the Psychiatric Clinic suggests as least one plausible reason for the difference. Here there were nine categories of complaints as opposed to the 51 in the Psychiatric Clinic.

Table 21

Distribution by Presenting Problem Counseling Center

Presenting Problem	Number of Students
Choice of major	15
Choice of career	8
Choice of courses	7
Concern about study habits	7
Concern about interests	7
Pre-registration counseling	4
Assistance in finding another University	2
Information about housing	1
Difficulty in making adjustments to school demands	1

Of the 60 students who were seen in the Counseling Center, 26 dropped out of school before completion of the four years (43.3% compared to 65% for students who went to the Psychiatric Clinic.)

Qualitative Data: An Attempt at Synthesis

Emotional problems are experienced by individuals. The above quantitative data of a selected student group is difficult, if not impossible, to envisage as living, breathing students interacting in a University environment. The following four summaries attempt to pull together information from all available sources (psychiatric records, research interview, etc.) in order to give life to numbers. There were 493 such lives passing through the Psychiatric Clinic from this class, each a unique individual with a unique past, troubled emotions, desires, impulses and frustrations.

When presented as people, none of the four could be considered typical of students. Neither were the rest of the 493. Neither, one suspects, were any in the entire class.

However, in addition to trying to get a feeling of the students presented here as people, it might be possible to note similarities and differences between them that could account for their coming to the clinic as well as their outcomes and future prognoses.

Mr. A

Mr. A was eighteen years old when he came to the University. He is a blond, well-built young man with a short haircut and a deep tan. He never smiles, almost always scowls, moves slowly, appears depressed. When he talks he holds his hand over his mouth and turns his head away slightly.

He came from a small city about 100 miles from Berkeley, where he had lived with both parents and a younger brother. Both his mother and father had completed high school but neither had gone any further with their education.

A's father works in a factory. His mother works as a psychiatric nurse. The family was described as middle class; father is Catholic, mother is Protestant, and both children were brought up as Protestants.

A felt his early life had not been too happy. His father had been a severe disciplinarian with a "tremendous need to be right almost all of the time." A's mother constantly interfered in his activities with girls while he was in his last two years in high school and A had had a severe depression necessitating psychiatric help before coming to U.C., because of his mother's interference and restrictiveness about his dating.

A came to the university on an athletic scholarship. The first semester he lived in a rooming house, made very few friends and did practically no dating.

In his second semester he joined a fraternity and started to participate in much of the social activity around the house. Sports and fraternity events took up most of the time he had available outside of study and classes. He got money from his parents as well as his athletic scholarship and planned to work during the summer vacation for extra money. It was difficult to know what his self-perception was during that first year.

His Student Development Study interviewer during that time saw him as pessimistic, bitter, covert, frightened, not very outgoing or giving, markedly conservative and strongly resentful of being bossed, unless it was by someone with high status or prestige, in which case he would become extremely compliant.

Other liabilities included a restricted childhood, overdependence on parents, a "jealous" mother where girlfriends were concerned, and an authoritarian father. When A was first seen by his interviewer in the Student Development Study, he was felt to be a good candidate for long-term psychotherapy because he seemed so depressed.

However, shortly after he pledged the fraternity he began to go out with girls a little, had more interaction with members of his own sex and made some sort of an adjustment to the academic side of school, although he was handicapped by poor reading skills.

During his second semester he seemed more self-assured, less anxious and less depressed and he attributed his improvement to his having joined the fraternity.

Following his return to school from summer vacation, he was again felt to be depressed and this was thought to be related to his having lived at home during the summer, while working. It had apparently been a very difficult job which he had "hated," except for the money he had received, and he seemed genuinely pleased to get back to school, if for no other reason than to get out of having to work.

His aspirations when he first came to school had been the attainment of a law degree. By the beginning of the second year he had decided he was going to become a sociologist, although he sounded as though he was not too sure what he was going to be. His interviewer had real doubts at this time about whether A was even going to make it through school, mainly because there was so much anger in this student as well as a great reluctance to do academic work. The interviewer felt, however, that he probably could benefit considerably if he were able to accept some kind of long-term investigation of himself.

Another interviewer who saw A in the fourth semester was equally skeptical about A's claims of new-found emancipation from conformity and felt he was "somewhat phoney about his renunciation of the past." The interviewer felt it was just more self-deception, and thought that the student seemed socially withdrawn and self-centered. "He spoke more as if he were in a trance than wide awake. His views of morality and sex expressed conservatism and restraint, and was further evidence of domination by rather than emancipation from his past."

Mr. A went to the Psychiatric Clinic for help in December of 1961, between his first and second interview in the Student Development Study. At that time his entering complaint was: "Lack of adjustment and good mental health, becoming cynical, becoming sacrilegious, for periods of elation and depression, and sensitivity to the actions of others." For "recent upsetting occurrences" he wrote: "A trip home during Thanksgiving vacation and a realization of how I have changed, linked with memories I would do well to forget."

The admission note by the psychotherapist stated:

> "An 18 year-old boy who is not too interested majoring in social sciences. He has been a rather isolated and not too involved person, who in his last year of high school became infatuated with what seemed to him to be his ideal girl. After going with him for a year she dropped him. Since that time he has lacked any zest in his life and has not been able to pick up the threads in his life that were enjoyable to him before. He has spent a good deal of time mulling over his loss of her and comparing her with all the other girls he sees. Actually, this has passed its peak and he now begins to find his voluntary increased isolation unsatisfactory and a good number of his questions seem to be around whether he should try and engage more actively in life again. There seemed to be little need for any continuing therapy at this time and I told him, as well as reassuring him about his tentative efforts to pick up the pieces."

The psychotherapist had felt that A was isolated and overwhelmed, with little social life or friends and had somehow expected college life to change these things. In high school he had also been isolated and ill-at-ease until he made a huge effort socially and athletically in the last year, but this seemed to have done little but change the superficial things, the exterior. He summarized as follows:

> "This young appearing boy seems to have been greatly hurt and depressed by seeming rejection of first love since she had become the guiding light in his beginning adult adaptation and identity formation. College is incidental to this, but he seems to be recovering and beginning to be ready to make use of the college environment. Above adult adaptation and identity formation appears delayed in this boy. There was no psychotherapy."

In 1962, Mr. A was seen twice in the Counseling Center; once in September and again in October. He was described as "verbalizing easily with a considerable number of slang expressions, rather adolescent, rebellious tone of voice, slightly effeminate."

He came in specifically to take tests because he was thinking of going into law and wanted to check out if this was appropriate. He said that the only thing he was good in was social science and he did not mean by this psychology or economics because he had tried them and had not done well. Political science was out because he did not like current events. He felt he could make "a great living in either sociology or anthropology," though he really wondered about his choice. He knew he could not work in a social science because he would not want to teach. He also said: "I know I do not want to help people." Physical sciences were competely out because he could not understand math; he could not see Humanities because he was not a good writer, though he did like English and history. He revealed that he wrote poetry and did not understand why so many people were so against poetry. He had never had anything published. He had never been able to write stories because he could not develop a whole plot.

In school his grades had dropped perceptibly because of too many commitments. He worked in the athletic department five hours a week. The fraternity did not fit too well with his personality so he depledged and moved to an apartment with two other fellows, one in physics and one in engineering, who had also depledged from the fraternity at the same time he did. The apartment was a twenty-minute walk from campus, was nice and quiet, and he thought he would like it. He asserted when discussing his roommates that practically everyone he met whom he liked was either in science or engineering. He did not "cotton" to the few people he had met who were in the humanities or social sciences at all "because they seemed to be beatniks, or something like that."

The counselor's impression was that A was a great deal more interested in the fine arts than he recognized or would admit. He had done some painting in the past and said that this was the only thing he had really been able to get involved in. He took one art course in high school and dropped out of it because he did not like the teacher, and it never occurred to him to take another one.

In the second interview at the Counseling Center, Mr. A volunteered that he had thought of taking an art course but had decided against it, feeling that 17 units would be too much for that semester. There was some discussion about his liking to work with words in his writing. He recalled that he had been in a gifted class in high school and that many of the other kids could write so easily that he always felt poor by comparison. He imagined that people who went into Humanities had "enormous" backgrounds in literature, art and music. He seemed to have a strong need for achievement and spent some time talking about how "law" appealed to him because of its position in society.

He missed the social life of the fraternity. Recently he had been doing no dating. He disliked all of his teachers but had been working hard on his courses and hoped to get at least a 3.0 average.

At the end of the second year Mr. A left the Berkeley campus and turned up as a registered student at another University of California campus in the beginning of his junior year. After leaving Berkeley, Mr. A answered three questionnaires for the Student Development Study.

In the first questionnaire in 1963, he asserted that his new campus offered a more relaxed, socially easy atmosphere than the one he had experienced at Berkeley. There was more friendliness on the part of fellow students and a more pleasant classroom atmosphere. In response to the question: "If you were required to take only one half of your courses but were given full credit, what would you do with the half time so freed?", he wrote:

"1. Socialize, drink, party, lay as many girls as possible.

2. Read and listen to music."

In response to the question, "Have your interests changed since high school? To what do you attribute these changes?" he wrote:

> "I like sports, movies, TV and kissing less. I like reading, music, women, people, plays, drinking and smoking more, with studying about the same as before."

He attributed the change to an increase in maturity and to widening experience and age. He had come to realize that

> "Working for the grade and considering the knowledge gained as only secondary is an attitude which may not be very academic, but it is practical, especially in this cut-throat multiversity."

After graduation he wanted to do more, get prestige, social stature, money, and a feeling of accomplishment. If he had all the money he wanted he would become a playboy and completely anaesthetize his senses with physical and mental pleasures. He said:

> "I realize I do not possess a great enough mind to leave any noticeable footprints in the sand. I also realize

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> that 'when you're dead you're dead, so live for the present'."

He felt that the first two college years had had absolutely no impact on him apart from his courses. He had changed his major to sociology because it was easier.

Reading through the next two questionnaires gave one the impression of a fairly severly disturbed student. There was always a tone of jovial extroversion, boisterous feelings with an underlying strain of "intense loneliness underlying my conscious existence, realized most strongly when I am alone, particularly at night with only the ocean's rushing." To the question, "What do you do when you are alone?" he responds:

> "I long for feminine companionship, become restless, spend hours writing poetry and an occasional short story, always romantic, or listen to music (particularly Wagner) and lapse into technicolor reveries of what I imagine the music represents, becoming so emotionally enthralled that I weep and am wafted from the pinnacle of joy to the abyss of depression by the flowing notes and chords."

He continues:

> "I always feel lonely; it is suppressed only by study or feminine companionship or carousing. Daytime loneliness is ameliorated by talking to someone, but frequently it is incurable. Nighttime loneliness is cured by going to bed or increased by revelling in a poem I have written or am writing at the time. A Saturday night alone is horrible and I greatly envy persons at parties. During intense periods of loneliness the entire world of social convention seems shallow as a puddle of rainwater and I am in the depths of despair."

Mr. A's intense emotional attachment to women is exemplified by an intimate pen-pal relationship with a girl at Berkeley. One gets the feeling when he writes about this that if she were at his new campus there would be no relationship whatsoever.

Mr. A planned to get married after he got his degree, and lists some of the requirements. His girl must be very feminine, have polished nails, pretty hair, be effervescent, very affectionate, and most of all, even at the sacrifice of extraverted party-going ebullience, she must be gentle and sensitive. She must cry when she reads Fitzgerald's Tender is the Night, or sees "Breakfast at

Tiffany's" as at a tragic opera. She must be submissive and dependent on him.

> "Union with a masculine, aggressive, unsensitive or non-delicate girl would be impossible for me, as would one with a woman who was stupid or who liked rock and roll music or had majored in anything but liberal arts."

In December of 1964, he again responded to a questionnaire. At that time he was living in an apartment with a graduate student near the campus. He was working toward a B.A. degree in a humanities subject, to be acquired in February of 1966, and then he planned to go for a teacher's credential or perhaps try to get into law school or get an advanced degree in History. He planned to stay away from his family. He felt he had acquired a large degree of stability in the semester just passed and also felt his career plans were not as nebulous as they once had been.

He described himself as follows:

> "I have been an eternal Shelleyesque idealist with aspirations transcending my mental potentialities. I shall always wallow in poetry, music and art, but I realize the necessity of trying to support myself in this "protestant ethic" practical world. I still hold certain values which I shall not permit to be thwarted. There is an inherent value in the arts. Men pass on but the footprints they leave behind are forever fossilized in the sand. Footprints are more important than corporations."

He now says he acts and feels "a hundred percent independent." He is financially his own boss now and paying for his own education. He feels no inferiority around his peers now. He plans to get engaged during the summer.

To the questions, "How often do you get depressed; what is it like, how do you handle it?" he responds:

> "I get depressed several times a week, usually when I have nothing with which to occupy my mind or when I am alone or receive a bad grade. I feel like immersing myself in a mist of forgetfulness. I go to bed."

It seems no great mystery that Mr. A had an unhappy childhood - with a father who was a severe disciplinarian and a mother who consistantly interfered with this socialization with members of the opposite sex it could hardly have been otherwise. It is not too clear why he came to the Clinic. Perhaps it was suggested to him by the Student Development Study interviews and his memory of his previous psychiatric help. It is fairly clear from the record that he got no benefit from his visit to the psychiatric clinic, but did seem to accept some of his more feminine impulses following his talks with the counselor at the Counseling Center.

Social deprivation and an inability to correct it at this late date seems to central in this young man's difficulties, although there is more than a hint of severe authority problems lurking in the background. From last contacts with him it seems that his life hasn't changed too much, and it is felt that he probably will have to seek help in the future when acute crises of an "authority" or "loneliness" nature present themselves.

Mr. B

When first seen as a freshman in the Student Development Study, Mr. B was described as a pleasant, cooperative, able and industrious student who had every confidence of success in a scientific career. At that time the interviewer noted a "degree of uneasiness in B's response to social situations" as well as in the interview itself, but the interviewer did not feel it was either unreasonable or inappropriate given the novel situation. It was felt that a rapid adjustment to the new college life would be facilitated by the student's previous (travel) experiences and past superior academic achievements.

The impression one gets from reading the notes of that first interview was that B was hopeful and confident. The only problems were really about getting adequate housing and finances (although the student's father was suppdying half of the expenses). B planned to major in a natural science with the hope of getting a Ph.D. in it. An older brother with similar interests but less academic ability had "flunked out" of the University of California.

When seen in the second interview of the Student Development Study, Mr. B had fallen behind six grade-points during his first semester and his confident attitude had given way to serious concern about academic success.

He was at this time still living in a small rooming-house with several other fellow students, but was planning to move into a dormitory the following year, "if I am still here." He had had little interest in girls or dating and was still concerned about financial problems.

During this interview the picture the student presented of himself made the interviewer question his former judgment of the appropriateness of B's social uneasiness. He felt B was "inarticulate and unresponsive to most of the questions asked," and in lieu of answers he would respond with a compulsive smile.

At home he had a mother, father, an older brother and a younger sister. His father worked for the commercial section of a newspaper and his mother was a housewife who had never worked outside of the home. The older brother, as mentioned above, had flunked out of school. The younger sister was still in high school.

Mr. B was either unable or unwilling to discuss family matters or his feelings about his family in the Student Development Study. He would or could not characterize any distinguishing features or traits of individual members of the family. He did recall a fair amount of fighting with his brother and his father, who did the punishing in the family but was also the comforter. Both his father and mother had some college education, but neither had finished school.

Mr. B "flunked out" of Cal at the end of the first year and spent the next year at a junior college where he apparently did well enough to enable him to return to U.C.

When seen again in his junior year, he reported that he was missing the personal contact and encouragement from his professors which he had enjoyed at the junior college. He appeared to be lonely, had only superficial contacts with his male peers, none with girls. His interviewer at this time described him as a slight, feminine-appearing fellow who gave very little information about himself. It was also noted that Mr. B seemed to enjoy his courses until he got his grades, which were usually failing ones. His main interest at this time was in a different natural science than the one he had originally thought of majoring in. He liked working in the laboratory and stated that he preferred the practical side of this discipline to theory. His interviewer stated that she felt as long as Mr. B had to struggle as hard as he did to remain a student at Cal, he had little chance for intellectual growth. Also, his great need for personal attention from his professors was very much frustrated at U.C.

The first note (in the record) that gives any clue to difficulties of a psychological nature is a note by one of the administrators in the Psychiatric Clinic stating that there had been a phone call to a Dr. N in the Psychiatric Clinic regarding Mr. B. Mr. B had been assigned to Dr. N as his therapist, had made an appointment but had not shown up, and finally, when Dr. N and the student had gotten together Mr. B was angry with Dr. N because he had not been able to see him when he wanted to do so. He insisted that he wanted to drop all of his courses except one. Dr. N suggested that he might wish to talk about what was going on, but the student refused to do this and left after about fifteen minutes, still angry.

About ten days following the above meeting, the student phoned to say he had talked to a Dean at the College of Letters and Sciences about dropping his courses and the Dean had said he must get an excuse from Cowell Hospital. Dr. N felt it was not clear what role Cowell Hospital should play in the matter and told the student he should clarify this further with the Dean of the College of Letters and Science.

Following this, Dr. N received a call from the Dean, who said he was under the impression that the student was in treatment at the Psychiatric Clinic at Cowell Hospital. Dr. N confirmed the Dean's impression that the student was upset and would probably require some kind of administrative intervention.

Then follows a letter from the student to the Dean, dated November 21, 1963. It states:

> "Dear Dean K:
>
> I have had it, I quit. I am sick of talking to brick walls, especially ones who think they can keep people fenced in, mainly Dean K and Dr. N. I have had it. I am tired of feeling depressed, tired of seeing things that don't exist, tired of thinking about killing myself, tired of seeing all these phoneys who think they are smart, but only know how to beat the system. This isn't a great University, all Cal knows how to do is trample, squash and kill. Consider me trampled, squashed and dead. Forget about me, forget about everyone, forget about humans and put 27,000 bodies here to see if they can beat the system. I have had it. Cross my name off. Keep your goddamned University, god damn it, I am going to kill myself.
>
> Your laughing body,
> B
>
> P.S. Don't say I have to fill out a form for I will never touch another form from the great University of California."

The original intake note by Dr. N stated:

> "Came in defiant, glaring with rage, apparently to make up for his uncertainty about what was bothering him. Seemed to be looking for a way to externalize his difficulties, but really unable to. As his bluster began to fail him and he began getting feeble, he abruptly left after about 15 minutes. My impression was that he felt he wanted to drop these courses but couldn't say why and felt he would be laughed out of the office unless he made scary faces. Hard to evaluate beyond this."

A summary of treatment stated:

> "After spending several weeks attempting to drop several courses, Mr. B wrote the (above) enclosed note to the Dean. He was sought out, brought to the Clinic by Dean X. He appeared depressed, almost tearful, but with a smile on his face, and he denied being upset. He was hospitalized for several days, during which time he appeared less depressed, seemed rigid, highly controlled and strikingly unable to formulate about his behavior, his future goals, etc. He wanted to have me do all this for him. He was told that I would not help him drop courses but would be willing to give him a leave of absence if he wished. After several more visits to the Dean he accepted this. When last heard from, he planned to enroll at a Western state university. Regulations concerning leave of absence were explained."

The diagnosis was "depressive reaction of neurotic degree."

The next contact the Student Development Study had with Mr. B was the receipt of a questionnaire which he completed in May, 1964. At that time he had almost completed a semester's work at his new university and was spending a great deal of his time playing bridge at the local bridge club. He was living with his parents and was trying to get a job lined up for the summer. His main involvements as far as recreation was concerned were bridge playing and cave exploring. He felt the reason he had left U.C. was because he had become depressed and that he continued to become depressed, usually when he thought about things he would like to do, or that he should have done.

He said he felt lonely quite a good deal of the time, then denied this and said he really liked being alone, away from other people. The way he achieved this was either to study or go to sleep. He claimed he was still very much of an isolate, although he did have a couple of friends. He didn't spend too much time thinking about marriage although it occasionally crossed his mind. If he did get married, he saw himself marrying someone pretty much like himself; someone fairly good looking, who shared the same pleasures and whom he could admire and who would admire him.

Further information from Mr. B in response to a questionnaire in December of 1964 revealed that he had actually gotten a job for the summer working as a lab assistant in a experimental laboratory as part of a cooperative education program at his university. His spare time was occupied by either doing homework for a correspondence course or driving around the countryside. He was now living on campus rather than at home. He has little contact with his family.

His brother was living in Los Angeles, busy trying to complete his own college career. His sister usually had a date with some boy or other, so they hardly had a chance to do anything together.

His goals were to continue his education toward a degree. He thought he would probably work in industry rather than teach, at least at first, although he had not given up the thought of becoming a college professor. He said:

> "My major has changed twice since I started school. At first I had a major in [a natural science]; then came [another natural science], and now finally Engineering. I imagine this will be the subject I get my degree in, for I enjoy the material studied and the professional opportunities upon graduation."

To the question, "How would you describe yourself? Give an uncensored and uninhibited picture of yourself," he replied:

> "A description of myself--well, I guess the best way to describe myself would be to pick out an overall picture such as J. D. Salinger's or perhaps as one of Thoreau's 'mass' when he said, 'The mass of men live lives of quiet desperation.' I tend to have an unrealistic view of the world and my position in such a world, whatever it may be. Usually I think of myself as rather inhibited or in a restrained position. Not being able to do what I really want, just doing things someone else wants or says I must do as a member of 'a society.' I like to do things by myself most of the time and dislike being disturbed by anyone for any reason. When I do things with others it is usually in small groups of long established friends, for I generally dislike meeting new people, but after meeting them and seeing one another around, I don't mind it too much. As I see other people or in relation to other people, I don't seem to enjoy myself as much as they do. I just go along from day to day without really enjoying what I am doing or the things I see around me. I don't know. I guess one could call that a description--it's not easy to describe yourself."

He could not really think of any differences in himself since he entered college except that he resented someone having authority over him or possibly being able to force him to do something he did not want to do. He could not tell whether he acquired this in the last three years, but perhaps it was stronger now than it was in the beginning and he did not know how to account for this. He felt he probably had become more alienated from other people but it was hard for him to say if this was any change or something new. However, he viewed his relations with others in a different light; more than just accepting the friendship but questioning if this had some ulterior purpose or was good, or just what its relationship to his life was. What he liked about himself was his ability to learn and correlate data. He enjoyed learning and if he really got interested in something he did nothing else but "find out about it" until he saw how it went and then he stopped and found something else to study. He felt that he guided his conduct by keeping line with the conduct of the group that surrounded him at the time.

> "Sometimes I will act in a certain manner with one group and another way with another group. There can never be a meeting of any of these groups because they are so divergent and distant in likes and dislikes that they will never clash. In other words, I play along with everybody else, so as to fit in with the group."

In response to the question, "In what respects do you wish you had changed more?" he said:

> "I can think of just one or possibly two instances, I wish that my position or ability to get along with members of the opposite sex had changed to be a little more normal, or at least what I consider normal. I can also think of one more way. I should have changed more but haven't seemed to have gotten around to it. It concerns the ability to make a decision and then follow it out no matter what anybody else might think. That is something I would really like to be able to do."

In response to the question, "What past and present factors account particularly for your having become the person you are now?" he says:

> "I think college has had a greater influence at present, more so than in the past. That is partly attributed to this work program that I am in and the contact, shall we say, with the working class. This has had a great effect and will have, I imagine, in the years to come, before I get my degree. My parents have had an effect, sort of an opposite effect, that is to say I am different than my parents and most of the ways in which I have prejudices and pet peeves. Sometimes I have a great desire to get away from the immediate proximity of my parents, because whatever they are doing seems to make me angry or self-conscious, but for the greatest influence I would have to say college for the mere fact that the things you find out are done by you and you alone. Nobody gives a damn about you, it's you and you alone."

He did not think there had been any changes. Any changes that might have occurred had been slow and he did not feel he was terribly different now than he had been three years before. In response to the question, "How often do you get depressed?" he said:

> "I get depressed quite often, which is as close to frequency as I can come because some times are worse than others, and when it isn't too bad it could be frustration rather than depression, or something like that. It's hard to describe what it's like. Usually I feel sort of withdrawn, shut off from everybody; time passes and I am not aware that it has as I usually start doubting, doubting all sorts of things. I usually walk, even though I see things along the way I do not remember. Sometimes I drive around, try to study or more generally sort of daydream, the same dream, the same dream I have been working on for a while and some day I may just be pushed far enough to do as the dream."

Mr. B is fairly rare in the student population in that he flunked out of school following his first year at U.C. This happens to only about five students out of 100. And his coming to the Psychiatric Clinic to get permission to drop courses must purely have been occasioned by a fear that he would "flunk out" again. He got no real psychotherapy in the accepted sense, since he was caught in an unfortunate lack of understanding between administration and the Psychiatric Clinic that finally got him hospitalized as a "suicide threat."

Again, like the previous student, B was lonely, lacked social contacts with the opposite sex, and had some difficulty with academic success. He did not seem to be as unclear about what he wanted to do, and although he had changed majors three times since entering college, he was still in the scientific field and still considering teaching.

B continues to be depressed but feels his relations with the opposite sex is changing, more in the direction of "normal." From his responses to the questionnaires since leaving U.C. he seems to be more introspective and insightful about some things, but he too seems to have a tough time coming to terms with his past and may eventually have to seek some kind of help in a crisis situation. He will probably find it more difficult to return to a psychotherapeutic situation following his unfortunate contact with the psychiatric clinic.

Miss R

Miss R was seen in the Student Development Study for four interviews before she "dropped out" of school. She was eighteen years old when she first came to the University and was described by her interviewer as a short, plump, blonde, moderately nervous and superficially cooperative student.

Her parents were divorced and had both remarried. Miss R had spent the last two years before coming to the University with her father and his second wife. Neither set of parents had completed college; her father and stepmother had not gone beyond high school.

She had an older full sister who was married, a younger half-sister, age 12, and a stepsister of her own age. Both sets of parents shared her expenses while she was at Cal, and pretty much left it up to her what she wanted to do with her life. The student was never sure whether she was being given freedom of choice or being rejected.

When first seen, Miss R wasn't sure what she would be majoring in, but said she wanted to be a teacher, probably in the elementary school system. She seemed to be a little lost in the school environment as though she did not know what she was doing there. She apparently had very little social life, had never had a boyfriend and was not very attached to boys. She tended to under-rate herself and felt quite limited in skills and life experience.

Miss R went down a few grade-points in the first semester and had to do a lot more work in the second semester to make them up, which she accomplished successfully. Everything went much better in the second semester. She made some friends, went to lectures in the evening, joined a yacht club and did quite a bit of folk dancing. In general she was more active during this time, but the interviewer remarked that he felt she still appeared isolated and lost, and probably would have done better if she had gone to a smaller school.

In the summers, Miss R worked in a resort. She was accustomed to being away from both families for fairly long periods of time. Her summer job placed few demands on her time and allowed her to think about herself. She felt she was different from all of the members of her family and saw herself as the "black sheep." While at work she would do a moderate amount of reading and in the summer between her first and second years in school she became quite involved with her problems of loneliness after reading Thomas Wolfe's You Can't Go Home Again, and Look Homeward Angel. When she was seen in the Student Development Study in the first semester of her sophomore year she appeared quite depressed and said she was having much difficulty with her loneliness and isolation. At that time she thought she would seek help at the Psychiatric Clinic at Cowell Hospital.

She was seen for a total of eight hours by Dr. F. She also went to the Counseling Center for two hours at the same time.

Miss R's entering complaint at the Psychiatric Clinic stated: "I have a problem of eating when nervous, worried or bored. Can't become interested in people my own age." There had been no recent upsetting events. Dr. F said in her intake note: "A nineteen year-old sophomore brought in by general identity confusion." A summary of the treatment interaction stated:

> "Patient was increasingly able to separate own feelings and attitudes from those of her friends and family, and terminated at the point where she felt reasonably free to make her own plans."

The diagnosis was "Anxiety Reaction."

Miss R's Student Development Study interviewer had rated her as average in intellectual and aesthetic areas, low in emotional complexity, high in autonomy, low in openness and integration, and low in object-relatedness. He also felt she was below average in impulse expression. He felt the student would have to find someone who could become interested in her in a supportive way, but did not see this as happening easily since she tended to stay by herself, not venturing forth into much inter-personal activity. He felt she was in this predicament, at least in part, because of her early life in a split family, neither family being terribly interested in her. She apparently had gotten lost in the shuffle.

In the fourth Student Development Study interview, Miss R reported that she had seen a psychiatrist at Cowell Hsopital and felt it had worked out very well for her. She said she had gotten over her depression and had learned a great deal about herself. She said she was doing all right in her courses but that they were tedious and boring. Her social life had not changed much and she had not involved herself in any campus organizations or activities.

She had made a few new friends and was in the process of breaking off with an old girl friend who had accidentally become pregnant. She spent a good deal of time daydreaming of getting married, having children and owning a home. She said she did not see that as necessarily "the good life," but that it was that most probable thing that would happen. She ranked family, leisure, helping others and career in that order of importance. She had no interest in religion, although most of her close friends were Jewish and her roommate's father was a rabbi.

The interviewer's impression of Miss R at that time was that she had been forced on her own resources in the realms of religion, morals, and politics by her lack of contact with either set of parents, and had become fairly tolerant and liberal in the process. He felt she had a tendency to become depressed because of her lack of roots and also as a way of keeping "unacceptable" impulses under control. The interviewer felt she had gained some benefit from her talks with the psychiatrist. He stated that he imagined she would continue in a liberal direction, whether she stayed in school or not.

Following the fourth interview in the Student Development Study, Miss R met a Jewish boy and got married rather suddenly. She dropped out of school because they had to move to Tucson where her husband was going to be teaching. According to the questionnaire which she returned in 1964, she had enrolled at the university with a major in a social science, and was having a good time with school and marriage. At that time she was planning to go to a summer school abroad.

Her husband, who was twelve years older than she, was teaching at U.C.L.A. She reported about her marriage:

> "I married a very sweet, warm person, in a way ageless. He refuses to act as he should but acts as he wants; in fact, together we have become carefree fifteen year-olds. He still takes extension courses, reads a great deal, has an extensive interest in history, art, literature, movies. He doesn't like anthropology, sociology and nature as I do, but we both need separate interests, so except for a melancholy regret on my part once in a while, that doesn't matter. He is Jewish, but just barely. He is very family-oriented, which should actually tell why I married him:
>
> 1. He was sensitive and interesting yet wasn't 'sick'.
> 2. Idealistic.
> 3. Wasn't involved in the business world (teacher).
> 4. Active physically and mentally.
> 5. Was Jewish.
> 6. Liked children and would be a good father.
> 7. Brother married a Negro girl so I thought we would have some cause to be allied with (but we are not very active in civil rights).
> 8. Had same attitude about money as I did (e.g., 'pay cash').
> 9. Hasn't a temper; Is rational.
> 10. We have a balance of independence and dependency.
> 11. Doesn't smoke, drinks little, doesn't like football, baseball, bowling or golf.

For Miss R, a bad marriage would comprise being married to someone who was "sick" (homosexual, unsatisfied with life, etc.), very dependent or independent, worried about money, or "inactive."

In a subsequent questionnaire which she answered late in 1964, she reported that she had spent the summer in school abroad and had lived with a large native family. She had been disappointed in the lack of concern on the part of the new middle class with the country's problems, heritage and art. The courses had been fine and interesting. In their spare time she and her husband had wandered around visiting churches, places of interest, or just looked around. They spent six weeks in school and then went to the country's capital city for a few days.

When she answered this questionnaire she was living with her husband in an apartment, attending the university. There had been no change in her relationship with her family. She felt she was slowly being acculturated into a slightly Jewish type atmosphere. She was planning to graduate along with the rest of her (Berkeley) class. Following graduation she might go to school for another year, teach history in junior high school, or get her Master's degree.

She described herself as determined, calm, humorous, somewhat stubborn, lazy, interested in people and their problems, efficient if she wanted to be, adventurous, interested in numerous things, but nothing very deeply, liberal and non-religious. She felt she was different from the above when she entered college in that she was quite naive and more flexible with regard to ideas. She said: "My idea of what was good or bad for me wasn't decided then. I was unsure of what I wanted to do. I just accepted everything that happened."

She felt her academic education had opened new directions of interest, had caused her to be more rational and sure of her own views, also more critical of people and information. It had made her more aware of things previously overlooked or disregarded. She felt she was more independent but more alienated from people and had a tendency to ignore them.

She felt that her marriage had narrowed her contacts to a few people that they (she and her husband) felt were interesting and comfortable to be with. She still had a lack of self-control in eating, was still very lazy and had a lack of interest in her personal appearance. On the other hand, she felt she had much greater self-confidence and ability to get along with people, and seldom felt inadequate.

She wished she had been more ambitious. She accounted for her present self-sufficiency and independence by the fact that her parents had had a lack of ability in making decisions, which forced her to make her own decisions in all areas. She felt she had changed most radically from the end of the freshman year to the end of the sophomore year. She says she stopped changing at that point and had not changed for the past two years, even with marriage.

Miss R, like A and B, also presented a picture of loneliness and isolation accompanied by depression. She also was socially deprived, especially in the area of the opposite sex. However, she had had a great deal of experience having to make practical decisions for herself, having come from a broken home and having been on her own for some years.

She felt she had benefited greatly from her eight hours of psychotherapy. Her therapist apparently felt the same. Marriage to an older man, who loved her with the promise of a home of her own for the first time in many years must have been the answer to her every dream. She sounded like a different girl in her answers to the questionnaire; no longer depressed, no longer sorry for herself, growing and hopeful. Her prognosis seems excellent.

Miss Z

Miss Z came to the University from a small town. Her interviewer in the Student Development Study described her as tall and slender, with light brown hair and braces on her teeth. When she was first seen she was lightly made-up and was wearing a becoming dress.

The student's father was a medical administrator. Her mother stayed home and kept house. Miss Z herself stated that she wanted to become a psychiatrist, mainly because it was a psychiatrist who had done so much for her mother who had been an alcoholic but had stopped drinking shortly after having gone into psychotherapy. At the time the interviewer was impressed with the student's apparent commitment and noted that she sounded persevering. Miss Z also asserted that she wanted to get married too, and hoped she would be able to combine that with the profession of psychiatry. She felt her father had little faith in her ability to succeed, but she herself seemed to have gained confidence and independence since she had been in school. She had been self-conscious and shy when she started at U.C., but had become less so. She continued to be dependent on her family financially as well as emotionally, but also seemed to be dependent on her immediate friends. Essentially she conformed to what was expected of her, perhaps trying to adapt too much to the group with whom she lived.

The interviewer described her as friendly and honest, with good verbal facility and open to learning. The interviewer also saw her as intellectual, aesthetic, capable of emotion and close relationships, but more dependent than was useful. He felt the student was open to change but, "she may be reluctant to let herself go, indulge in impulses, lest it become over-indulgence. (That is, for example, she might not drink since her mother could not stop drinking.)" Throughout the Student Development Study interviews, Miss Z continued to persevere in her career goals. She did not feel that her moral convictions had changed since coming to school, except that she had become more tolerant of other peoples' convictions, could accept differences and still feel that others were human. She did not feel her own opinions had changed much. She was politically apathetic and was aware of the contradiction between her apathy and her belief in a democratic form of government.

The interviewer's summary stated that he felt Miss Z impressed him as morally conventional, with a developing tolerance for others, and a good chance that she would go further and even try a few things herself. He doubted that her political indifference would change during her college years. She appeared to get some comfort from her religion but it did not seem that she leaned on it too heavily for succor. Much of her general lack of involvement struck him as being the result of her keeping her eye on the main goal, medicine. There was a good possibility that she might enlarge her ideological world when she had enough time to give it some thought, and she might have to make the time when she came in contact with the myraid of human problems as she inevitably must if she stayed in the field of medicine.

Again, following her first interview in the junior year, Miss Z's interviewer stated:

> "Z is bright but not intellectually interested. She has one goal to accomplish, which is to become a doctor. She has only now discovered she feels 'uncultured' but has no time at the moment to do much about it except to recognize it and let her boyfriend influence her. There are vast areas she will have time for only after she is through with medical school."

The interviewer felt that acquiring a steady boyfriend was one of the more important events that had occurred to her up to that time and that what was hindering her most was the strong push for medical school which seemed to inhibit her vision of anything else.

He felt Miss Z appeared less attractive but happier since she had a boyfriend. She had more other friends also and appeared more at ease and secure. She also had some genuine liking for music, art, and literature, but felt obliged to feel she would like to be more cultured.

During her second interview in her junior year Miss Z seemed to be even more self-confident and happy with a steady boyfriend. She had been limited in the contacts she had been making. She had only one close friend (other than her boyfriend) whom she had met accidentally while looking for housing. She felt that her interpersonal relations would have to take second place to her goal of becoming a doctor. She was not very optimistic that marriage to her boyfriend would work out. She was looking forward to being in medical school the following year. At that time her relationship with her boyfriend was close, but stopped short of intercourse, which she felt she would reserve for the man she wanted to marry, after having had an experience in high school which she now judged was all wrong.

Miss Z entered medical school at the beginning of her fourth year in the University. She was seen again by her interviewer after having been in medical school for one year. He felt that changes were still continuing at a fairly rapid rate. Miss Z felt she had developed greater independence, social ease and a widening interest and enjoyment. She was one of few girls in her class of medical students, was enjoying her studies and planned to continue, get a degree in medicine, have an internship and eventually become a psychiatrist. She also hoped she would get married, but planned to practice before having children. She was also considering pediatrics as an alternative to psychiatry.

Miss Z looked more sophisticated, was attractively dressed, seemed sure of herself, was at ease and appeared happy. She had lost some of her dependence and need for security and did not seem as narrowly focussed on career as she had previously. She felt she had been more able to be herself and gave credit for this to the psychotherapist she had seen in the Clinic at Cowell Hospital. She said she now felt more free, had more intimate friendships with her fellow medical students. She was more attracted to one of the male students than to the others, and had been having sexual intercourse with him, but was not "going steady." She had been able to take her studies much easier and to be satisfied with B's and C's while spending more time going to art shows and symphony concerts. Her interests had widened as well as her own external involvement in them. Her behavior seemed more flexible.

There was some question in the interviewer's mind about the student's sex identification. She had chosen her father's occupation and becoming a wife and mother was not among her plans for the near future. Her mother's example of being an unsatisfied and "sick" housewife might be somewhat threatening. She had gained a breadth of interest since leaving college and was still developing. The interviewer felt that Miss Z was one of the few students he had seen who had changed greatly while going to school. There had been so much healthy development that it was felt she would be able to take care of the remaining conflicts and eventually combine career, family, and leisure activities.

Miss Z had been seen by two psychotherapists in the Psychiatric Clinic while she had been an undergraduate. The first psychotherapist, who say Miss Z four times, summarized the entering complaint as follows:

> "Patient came in because her mother felt she should. Patient's mother had been upset by a letter the patient had written home. The substance of the letter was that the patient was not experiencing the hoped-for expansion of dating activities. During therapy the patient focussed primarily on the troubles of her parents. The mother had recently resolved a severe drinking problem and was in therapy. The father had responded by becoming an even more alarming drinking problem himself and the patient somehow felt responsible for all this. She was also missing her role of mediator between her parents. Very prominent was her over-evaluation of psychiatry and her mother's psychotherapist, with much emphasis on how he had helped her mother, not apparently noting the influence on father."

The therapist's summary of the interaction included the following:

> "Patient expected to resolve dating problem. Had gone steady in high school, had broken up with her boyfriend as a senior and did no dating thereafter. She expected new environment to change this. When it didn't happen she complained to mother, who suggested therapy and hinted at her expectation that the patient would act out sexually. The patient was infuriated at this."

Miss Z's responses to a questionnaire she answered when she had already gone to medical school will fill out the picture. To the question, "How would you describe yourself; giving an uncensored and uninhibited picture of yourself?" she responded:

> "That is a task: physically attractive when I take care of myself and I consistently do. Socially capable of handling any situation. If I handle it awkwardly, even that is charming and usually laughed at. Mentally capable of handling a large amount of mental exercise, probably more than I do. Since I have finally learned to be myself at all times and to love myself for what I am, I have some people who like me for what I am and some who don't like me and everyone is happy."

To the question, "How were you different when you entered college in 1961, and what accounts for this difference?" she says:

> "If you look back in my records you'll see a tremendous change. In 1961 I felt I was extremely homely and plain, that I was socially completely incompetent and that I wasn't intelligent. How can I given any facts to account for the difference--three years of growing, longing to be myself, proving my capabilities. I could say finding 'the

> answer to life' if there is one and I know there isn't, to be completely and consistently honest about the ugliness and sorrows of life as well as the beauties. When I was a sophomore I talked several times with a female psychotherapist at the U.C. Cowell Hospital who pointed me in the right direction. My mother went through psychotherapy after an emotional breakdown in 1959, which may have helped too."

To the question, "What changes have there been in the principles or rules by which you guide your conduct?" she answers:

> "I have discovered there are no right or wrong rules or principles. The only principles I hold are:
> 1. True things are good things.
> 2. The most important aspects of life is communication with my fellow man.
> 3. I must always be myself no matter who wants me to be how."

She summed it up by stating she felt she had changed a great deal, but slowly.

Her second psychotherapist said in her notes after the first interview:

> "19 year-old sophomore, slender, pretty features, braces on teeth, somewhat apologetic about coming, feared the therapist would feel she was wasting his time (in previous therapy). Mother encouraged her to come, said patient didn't need to have as much trouble in college as she had. Mother is a real mother now and easy to talk to since her psychiatric treatments. Mother says patient hasn't even shown anger toward her and she thinks she should. She does feel some resentment now that mother is more ambitious for her than she is for herself. Mother hoped she would be accepted at a prestigious private college but the patient didn't care. Mother wanted her to join a sorority though she told patient she was free to choose. Patient didn't, mother said O.K., but patient felt she was disappointed. Father is quiet, doesn't go in for small talk. His employees love him. Student feels unable to communicate with him. Nothing she has to say feels quite as good as it should be. Unhappy that she isn't dating more."

A summary of the treatment by her therapist says:

> "Better able to know, reveal and accept her own feelings. Happy relationship with new boyfriend. Aware of and

> critical of tendency to be scornful of the fact his grades were lower than hers. She now wants to be a doctor like father. At end of semester somewhat fearful of falling into the old patterns when she returns home, but feels she has some choice. May return for a few interviews in the fall."

The diagnosis was classified as "Adjustment Reaction of Adolescence." An MMPI done in 1962 indicated "masochistic character disorder with severe repression of all assertiveness (hostility and thoroughgoing denial of the consequent widespread externalization). Unconscious fear of assault in therapy would be marked but seemingly impossible to get around, since she has to deny the fear, making for a patient who cannot experience help or support and who also cannot complain."

Miss Z sought help in the psychiatric clinic because she and her mother felt she was not getting all she could socially out of the college experience. She felt socially incompetent, lonely, had little if anything to do with boys and felt homely. Mother had been an alcoholic and had been helped by a psychiatrist, which lead to Miss Z coming to the clinic for help also. She saw two psychotherapists and gives a greal deal of the credit for all the "good" change that has occurred to her to this happy fact.

The factors which all the above students seemed to have in common, leading them to seek help were (in varying degree), loneliness, isolation, social deprivation especially with the opposite sex, and depression. The two boys, who were seen only briefly, continued to be socially inept and isolated, as well as lonely and depressed. They were felt not to have benefited from their visit to the psychiatric clinic. The two girls, however, who also suffered from the same difficulties stayed with the therapists longer, felt they had benefited from their mutual explorations of problems, and were subsequently less isolated, lonely or depressed.

Could it be this simple? Could a few hours with a psychotherapist have such a profound effect, when there is continual doubt in the literature that any psychotherapy, no matter how prolonged, has any effect? There are those who have practiced college psychiatry for many years in such a setting as the one at Cowell Hospital who are convinced that mutual exploration of difficulties of living at the appropriate time can change the direction of lives for the better in short periods of time. We will discuss this question more fully shortly--after having considered the cases of two non-patients.

The Non-Patients

If about half of the class received some professional help (either brief psychotherapy, counseling, or private "longer term" therapy), does this mean that the rest of the students were without emotional distress of some sort? Consider the following brief summaries of two students from The Student Development Study who did not come to the Psychiatric Clinic or the Counseling Center.

(a) A young man of 18, serious, attractive, well dressed, and looking older than his years came to the University from a farm community in the middle of the country to study English. He hoped to become a teacher and perhaps eventually a writer. He lived alone in an apartment, attended classes regularly, and did acceptable scholastic work, as attested to by his grades. He had few acquaintances and no friends, and was frequently lonely and depressed.

When he was four years old he left a toy on the basement stairs. His mother tripped on it, fell down the darkened stairs and injured her back. She has been a chronic invalid ever since. No one in the family ever blamed our student for the accident but there were constant reassurances from the other members of the family that he would be forgiven by God if he remained a good boy henceforth. However, the mood of the family changed from the day his mother fell. From having been a striving, hopeful and rather happy family, it changed to one in which the father and the older brother manifested ill-concealed bitterness and the mother became a whining complainer. Everyone felt deprived. The family had been moderately religious before, but following the accident the church and God became almost compulsive solutions to even the most trivial of life's daily problems.

The student was intelligent. During his early years he complied unquestioningly with the family practices of home prayer and regular church attendance. He also read a great deal, mostly for solace and escape from an ever-present feeling that he had committed some great crime. By the age of eleven he had carefully considered and as firmly rejected all belief in God, although he continued to go through the motions with the family, fearful of their severe disapproval if he disclosed his secret convictions.

He finished high school successfully and came to the University to get as far from his family as was possible without leaving the country. His parents supported him in school but he felt sure they would withdraw financial support if they knew he no longer attended church and was a non-believer. He remained a "good boy" in the traditional family sense. He had had very little social experience with members of either sex and had no sexual experience except for occasional masturbation, which made him feel guilty and somewhat of a failure. At the end of his second year in college he left school and did not return.

(b) A young man of 18, serious, attractive, colorfully but tastefully dressed came to the University from a large city. He was shy, soft spoken and somewhat self-depreciating. He was not sure about what he would like to become, but had some vague ideas about television newscasting, acting and, more secretly and fancifully, becoming a writer. He lived at "home" with a stepmother, some half-brothers and sisters, and some roomers, in an apartment house in a segregated part of the city.

His mother and father were both dead. They had been separated since he was five years old. His father, who had been a carpenter, went to Alaska following the separation but would return to the home from time to time during the student's growing-up years. When the student was fourteen years old he witnessed his mother's death from a gunshot wound through her heart, inflicted by one of her lovers. His father died about six months later of pneumonia following an alcoholic spree.

The student had been an excellent scholar, both in grammar school and high school. He attributed this to his mother's example and exhortations while she was alive. She had worked as a housemaid during the day and had gone to night school to complete her high school education. She had hung her diploma on the living room wall for all to see. The student was sure that he was the first member of his family since Adam who had ever gone to college.

In high school he had been successful, not only scholastically but socially and athletically as well. He had been Student Body President in his senior year. When he came to the University he felt an outsider. He attended classes but he made no friends and participated in no school activities. If it had not been for some of his old high school friends whom he had not let go, he would have been virtually alone. He had dissociated himself from his "family," none of whom were very interested in his activities, having serious troubles in living of their own.

After the first year at college the student got a job in the bookstore and started to feel a little more comfortable in the University surroundings, although he had still made no friends or participated in any school activities. By the beginning of the second undergraduate year he had married his high school girlfriend, which helped assuage his loneliness. She attended a nearby college and also worked part-time. By this time he had also decided on a major in English. He did remarkably well scholastically throughout the four years, graduated at the head of his class and received a coveted award and a number of scholarships to graduate school. He left the Bay Area to attend graduate school at an Ivy League university in the East.

Neither of the above two students sought professional help, although it was available and they could both have benefited from talking with someone. The second student said he had thought of it from time to time but decided that psychiatric help would be useless because the doctor could not possibly bridge the gap of understanding between himself and a person of such different social and cultural background as the student.

The first student did not seek help mainly because he felt no one could straighten out the real problems of his "mixed up" family relations or the bitterness of all the years of his childhood following his mother's accident, of which he still irrationally felt himself to be the cause.

Virtually all students seen in the Student Development Study had their own "story." Many seemed much more disturbed and troubled than those who sought help. It is not at all clear why some came to the Clinic and others did not.

Major Syndromes

By the time a student reaches college he is usually chronologically and physiologically an adult. It is primarily in his psychological and social growth that he is considered an adolescent or in transition to adulthood. Many writers in the educational and psychological fields have recently been listing the numerous tasks which college students must master if they are to be considered successful in their maturation: independence, dealing with authority, handling ambiguity, developing sexually, attaining prestige and developing value systems, to mention a few.[12] What happens to people who do not or cannot go to college in these areas of development? And for that matter, what of those who do not master these maturational tasks during the undergraduate years but who complete school?

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[12] Dana Farnsworth, in his recent book Psychiatry, Education and the Young Adult (Charles C. Thomas: Springfield, Illinois, 1966), devotes the third chapter to an analysis of the developmental tasks of college students. He reviews Erikson's stages of development following which he quotes in somewhat modified form the tasks mentioned in Report #32 of the Group for the Advancement of Psychiatry. In describing what, "ideally," college officials should strive for "in an environment in which students may learn how to acquire mature habits of thought and behavior, develop potential creativity and learn to be independent without being unnecessarily offensive to those who may not agree with them," he asserts with this writer's wholehearted agreement, "to apply sanctions in a punitive manner at this period of development only perpetuates the [undesirable] behavior and makes the rebellion more intense, more painful and more prolonged. Punitive action seems to justify the young person's resentment and to postpone or prevent the acquisition of self-control.

Almost everyone agrees that education is a good thing. Although the first twelve years are compulsory, the college years are considered a "voluntary" choice. That most other alternatives have been propagandized as inferior does not alter the myth of "the free choice" of going to college. Children save their pennies so they can "attend the college of my choice." Parents and other citizens are urged: "Keep our leaders coming, by helping colleges meet the cost of educating them. Give to the college of your choice. College is America's best friend."

Most students when asked why they came to college, look blank and respond that it was expected, that there was not anything else to do, that they had "planned" to go since they were small children.

When something goes wrong and students seek help, because they are in school of their own "free will" they or their families are held responsible for the difficulties, both by themselves as well as by others, with a concomitant feeling of guilt and failure. One of the major presenting problems which students come to talk about with psychotherapists or counselors concerns marked to moderate depression and an inability to do schoolwork. Of the 493 students from this class who sought help, 34 percent were struggling with this syndrome. Other students through the years have quoted almost the same percentage, though depression is sometimes called apathy. Almost all explanations have pointed to the depression or apathy as ways of handling unacceptable aggression. The aggression is usually described as a hangover from past family resentments, transferred to present situations.

What ails these people? They seem to be achieving academically if one is to believe their grades, but are desperately unhappy. They complain about depression and yet to an experienced psychotherapist most of them do not seem pathologically so. Diagnoses of "Depressive Reaction" are much lower than complaints about depression.

They have been called the "voluntarily compliant." They conceal from themselves that they are doing what they do not want to do. In the University environment with its diversity of values, their need for the approval of their peers, their desire for status and self-esteem and their fears of loneliness force them into conformity, against their best interests and their own basic values. Clara

Thompson[13] clearly depicts them when she differentiates them from the obviously "neurotic" (the people who suffer from a failure to adapt). She says of them: "They are helped by an anonymous cultural tyranny which subtly exacts submission as the price of success." Erich Fromm[14] writes about them extensively when he writes of the marketing orientation. These students, like many other people at a later age, seem to suffer from the compromises in values they have made in order to adapt.

In order to understand how psychotherapists can help such people one has to examine some of the underlying differences between the goals and methods of traditional education and that education or re-education in "self-knowledge" and "self-values" called psychotherapy.

In psychotherapy there are no lectures. It is a one-to-one relationship in which a dialogue is expected, and a human relationship established. Much learning is by example from a person who is trained and (in some cases) gifted in human living. Admission to the "course" is not based on previous "standards" of performance. Routine tests are not given, nor are grades. No scholarships are available or necessary. No diplomas are conferred.

Humiliations, indignities, blame, and other subtle or crude forms of punishment are not part of the psychiatric armamentarium (in modern times).[15] Advice is not given. Students are neither implored nor coerced to take this path rather than that, and psychotherapists do not have to demonstrate that kind of lack of ingenuity that eventuates in an appeal to force.

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[13] In Interpersonal Psychoanalysis, the selected papers of Clara M. Thompson (Basic Books, New York, 1964), this problem is discussed as a part of a chapter called "An Introduction to Minor Maladjustments." The question, she feels, is one of a conflict of values, and that it is the psychotherapist's job to clarify with the patient the factors which led to compromise of his own convictions.

[14] Erich Fromm writes about the same problems when he discusses the "marketing orientation" in Escape From Freedom (Farrar & Rinehart: New York, 1941) and The Sane Society (Rinehart & Company: New York, 1955).

[15] In an article in the Saturday Review (October 16, 1965) entitled "Why Teachers Fail," B. F. Skinner briefly reviews the history of punishments, crude and subtle, in education. Professor Skinner feels that aversive control used to coerce students "is perhaps an achievement but it is offset by an extraordinary list of unwanted byproducts traceable to the basic practice. . . . One of the easiest forms of escape is simply to forget all one has learned, and no one has discovered a form of control to prevent this ultimate break for freedom." He continues: "In college and graduate schools, the aversive pattern survives in the now almost universal system of 'assign and test.' The teacher does not teach, he simply holds the student responsible for learning."

For a majority of the students who come, this is probably the first time in their lives that they have been able to talk about their problems with skilled professional adults who have no special self-interest, no "axes to grind."

In a relatively short time, after some explorations and dawning understanding that they probably would be acceptable without the expediency, without having to give up their own convictions, their potentialities are again freed and for many a heavy weight is lifted from them. Choices become possible again. For many the question, "What do you want to do?" becomes a real possibility to try to answer for the first time. In some of these cases the student desires to take a leave from school after completing the semester. These students are pejoratively called "drop outs." Some students discover for the first time that there is a real question as to whether they ever wanted to go to college, or were just trying to please parents, or at least not disappoint them badly. Others decide that another institution could better suit their needs. Some, of course, return after a suitable time away.[16]

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[16] Arthur O. Lovejoy, in his delightful series of lectures "Reflections on Human Nature" (The John Hopkins Press: Baltimore, 1961), in which he traces some of the notions concerning basic motivations of man back through history (such as approvativeness, self-esteem, superiority, etc.) writes:

> A generation which has thus been so largely stripped of its late illusions and its too hasty confidence in humanity may naturally be expected to turn to self-examination, and to seek an answer--if it can be had--to the most searching and pressing of all contemporary questions: What is man, and what's the matter with him? If he is to be saved by knowledge, or not without knowledge, it is, as the oracle declared, to the knowledge of himself that he must look. . . Pure moralizing, ethical theories, the preaching of elevated ideals, have not proved adequate, though they are indispensable, remedies for man's disorders; for we have had many centuries of such preaching and moralizing, and while it has produced some considerable, though local and transient, improvements in human behavior, the total result, when one views the contemporary scene, seems amazingly incommensurate with the ambitions, the magnitude, and the duration of the effort and the genius that have been spent in it.

One could utilize the last sentence and apply it to the efforts and results obtained in a four-year undergraduate education.

Third in frequency of entering complaints, following "Depression" and "Inability to do schoolwork," is "Family Problems." Students who came to the Clinic with this category of complaint numbered 32 (6%). Although almost all students could be said to be coping with family problems in the sense that most were struggling with the tasks of achieving an identity (away from home) and becoming independent, people who present themselves as patients at a psychiatric clinic are usually thought to be struggling with the conflicts once had with parents and siblings in the past, more recently transferred to a new battlefield. All other complaints encountered in this population are small in number although not necessarily trivial in emotional impact.

Knowledge of the objective world has been the concern of our educational systems, but there has been insufficient interest or concern with the teaching of knowledge of self and the relation of self to its human and non-human environment. Counselors and psychiatrists have been trying to do their share. But the teaching of self-knowledge is too important for the best in human functioning and happiness to be left solely to a small minority in their offices, rather than having it permeate the entire educational process.

Brief Summary

Fourteen percent of those who entered Berkeley in 1961 sought the help of the psychiatric service. (If one considers that only about half of the entrants remained in school, the proportion of those seeking this help over the four years is even larger.) Close to 70% of those who came to the service were self-referred. They did not differ much from their peers in their majors, but they scored higher in scholastic aptitude and in such personality characteristics as autonomy, flexibility, imaginativeness, and estheticism. The students in their entering complaints describe themselves more frequently (34%) as depressed and unable to do schoolwork. Close to 60% of those students who came to the service more than once seem to have benefited from the experience. Most students were seen only five times or less. It seems that psychiatric help available at the right time, particularly in moments of crisis, can be beneficial in a relatively short time.

Many non-patients, among the interviewees, turned out to have problems similar to or more severe than those of the patients. What determines some people to seek help and others not to seek it remains an intriguing question for further research. For educational practice the important objective is to develop strategies designed to help those who do not now seek psychiatric help and are not able to cope with their problems by themselves.

Appendix A

OCCUPATIONAL CODE

1. **CLERICAL AND RELATED WORKERS** such as: bookkeepers, stenographers, cashiers, mail carriers, shipping clerks, secretaries, ticket agents, telephone operators, office machine operators, etc.

2. **CRAFTSMEN, FOREMAN, AND RELATED WORKERS** such as: tinsmiths, bakers, carpenters, masons, shoemakers, electricians, inspectors, cement workers, jewelers, machinists, painters, plumbers, etc.

3. **LABORERS** such as: garage laborers, car washers, stevedores, lumbermen, teamsters, gardeners, unskilled helpers in construction, manufacturing.

4. **OPERATIVES AND RELATED WORKERS** such as: chauffeurs, delivery men, laundry workers, apprentices, meat cutters, semi-skilled and unskilled employees in manufacturing establishments (bakers, tobacco, textiles, etc.), wholesale and retail workers, mine laborers, bus drivers, motormen, etc.

5. **PRIVATE HOUSEHOLD WORKERS** such as: servants, laundresses, employed housekeepers.

6. **PROFESSIONAL, TECHNICAL, AND SIMILAR WORKERS** such as: teachers, editors, dentists, clergymen, professors, instructors, doctors, lawyers, nurses, architects, librarians, social workers, accountants, funeral directors, photographers, dancers, optometrists, aviators, surveyors, chiropractors, athletes, etc.

7. **PROPRIETORS, MANAGERS, AND OFFICIALS** such as: public officials, credit men, buyers, officers, floor managers, proprietors, railroad conductors, etc.

8. **SALES WORKERS** such as: salesmen, insurance and real estate agents and brokers, stock and bond salesmen, newsboys, demonstrators, etc.

9. **SERVICE WORKERS, EXCEPT DOMESTIC,** such as: fire, police, barbers, beauticians, janitors, porters, waiters, ushers, practical nurses, etc.

10. **OTHER** such as: retired, disabled, etc.

X. **HOUSEWIFE**

Y. **DECEASED**

Chapter XII

PERSONALITY CHARACTERISTICS OF STUDENTS ARRESTED DURING THE BERKELEY SIT-IN OF 1964

Joseph Katz, Ph.D.

A Brief History of the Free Speech Movement (FSM)

For purposes of orientation and background we begin with a brief history of the events connected with the sit-in of December 2.[1]

There were indications during the summer of 1964 that some students would be pressing for educational reforms and there was talk among these students that if their arguments did not meet with a satisfactory response, they might, in order to gain a better hearing, resort to tactics similar to those used in the civil rights movement. In September, 1964, the SLATE Supplement Report published A Letter to Undergraduates by Bradford Cleaveland which contained a critique of undergraduate education at Berkeley and ended with a series of demands:

"1. Immediate commitment of the university to the total elimination of the course/grade/unit system of undergraduate learning in the social sciences and humanities.

"2. Immediate disbanding of all university dorms and living group rules which prescribe hours and which provide for a system of student-imposed discipline, thereby dividing students against themselves.

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[1] There is a large literature on the Berkeley events. Three anthologies bring together some of the literature. They are Lipset, S.M. and S. S. Wolin, eds., The Berkeley Student Revolt. Garden City, N.Y.: Anchor Books, 1965; Miller, M.V. and S. Gilmore, eds., Revolution at Berkeley. New York: Dell, 1965; Katope, C.G. and P.G. Zolbrod, eds., Beyond Berkeley. Cleveland: World, 1966. See also Draper, Hal. Berkeley: The New Student Revolt. New York: Grove, 1965; Lipset, S.M. and P.G. Altbach, Student Politics and Higher Education in the United States. Comparative Education Review, 1966, 10, 320-349. A review of the literature and an interpretation of student activism has been prepared for the U.S. Office of Education by this author under the title The Student Activists: Rights, Needs, and Powers of Undergraduates. Several other publications will be cited in the body of the chapter.

"3. Immediate negotiations on the establishment of a permanent student voice which is effective (that is, independent) in running university affairs.

"4. Immediate efforts to begin recruitment of an undergraduate teaching faculty to handle undergraduate learning in social sciences and humanities.

"5. Immediate negotiations regarding two methods of undergraduate learning which provide for the basic freedom required in learning:

> "a. A terminal examination system which will be voluntary and an option with 'b.'
>
> "b. Immediate creation of undergraduate programs of a wide variety in which the student will be given careful, but minimal guidance, without courses, grades, and units.

"6. Immediate establishment of a university committee to deal with these demands on the Berkeley campus."[2]

These demands which sounded rather utopian in 1964 have since moved into the center of discussion at Berkeley and elsewhere and some have been met - in large part due to student pressure. But in the Fall of 1964, the publication of the above and other documents did not create much of an impact. An editorial in the Daily Californian of September 17 called Cleaveland's letter a "needless noise." It rejected his demands as impractical in a large university of 27,500 students. The editorial ended by saying that despite "University red-tape, instructors' disinterest, rules and academic deadlines - the individual student gets whatever he wants out of this University in direct proportion to what he puts in - no matter who is in charge, no matter what the rules."

On September 14, 1964, a series of directives issued by the Berkeley administration set in motion a chain of events that was going to lead eventually to the mass student protest. On September 14, the Dean of Students announced that the side-walk in front of the campus would no longer be available for setting up tables, raising funds, recruiting members, and giving speeches for off-campus political and social action.[3] Leaders of 18 campus organizations, including political groups ranging from the far right to the far left, met with the Dean of Students which resulted in some concessions, but students were still prohibited from advocating off-campus political and social action and soliciting funds and members. Participants have remarked that the nucleus of the FSM came into existance right in the Dean's office, as the student leaders continued their discussion and decided on united action.

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[2] Cleaveland, Bradford. A Letter to Undergraduates. In Lipset and Wolin The Berkeley Student Revolt, New York. Anchor Books, 1965, 80.

[3] See the chronology of events in Miller and Gilmore, Revolution at Berkeley, New York: Dell, 1965, xxiv - xxix.

Throughout its history the FSM was a loose, at times internally dissenting, coalition of quite different groups of the student community. It was in this sense quite properly a "movement" rather than a "party" - the latter being an organization of people who define their interests as frankly partisan and in conflict with those of other members of the community while a "movement" is or is taken to be representative of generally shared objectives and grievances. Much of the increasing elan and size of the movement was due to the arousal of more student resentment by subsequent actions of the administration, with the issue becoming focussed on the relatively simple principle of political freedom, rather than the more complex one of educational reform about which students and faculty differ considerably in involvement and sophistication.

A series of protest actions by the students followed, such as an all-night vigil, setting up tables in violation of University regulations, a sit-in. This culminated on October 1 in a crowd of students surrounding a police car in which a student under arrest had been placed and preventing it from moving off. The roof of the car became a speaker's platform. This protest lasted until 7:00 p.m. of the following day and ended with an agreement between the students and the administration and a victory for the students, including the University's dropping charges against the arrested students.

The following days brought a series of agruments, charges, counter-charges, demonstrations. The FSM itself was split at times over what was the desirable course of action. Over the Thanksgiving holiday the Chancellor sent out letters charging four members of the FSM with leading, organizing and abetting the illegal demonstrations on October 1 and 2 and also charging a number of organizations which had participated in the FSM with violating campus regulations. It had generally been assumed that those events were officially forgotten. The administration actions resulted in increased mass protest and an ultimatum issued by the FSM. When the administration ignored the ultimatum, about one thousand students moved into Sproul Hall for a sit-in on December 2.

The sit-in was preceded by a noon rally which attracted thousands of students and at which Mario Savio said among other things:

> "There comes a time when the operation of the machine becomes so odious, makes you so sick at heart, that you cannot take part; you cannot even tacitly take part. And you've got to put your bodies upon the wheels, and the gears and all the apparatus, and you have to make it stop. And you have to make it clear to the people who own it, and to the people who run it, that until you are free their machine will be prevented from running at all."

Eight hundred people prepared to spend the night inside Sproul Hall. In the words of a member of the FSM Steering Committee:

> "On the fourth floor we set up a study area. On the third floor classes were held. The number of classes soon became greater than the space available on that floor, and we spread to the stair-wells and the basement. There were classes taught by TA's and others in Math, Anthropology, Genetics, several languages, the civil rights movements in the Bay Area. A class on civil disobedience was taught in the fall-out shelter. On the second floor we watched movies--on the serious side about HUAC, on the light side Charlie Chaplin. Joan [Baez] toured the building and led folk singing. On the first floor a full-fledged Chanuka service was held, which eventually broke into dancing and other festivities."

At 3:00 a.m. the following morning the Chancellor appeared, went to each floor of Sproul Hall and urged the students to disband or face arrest. At about 4:00 a.m. the arrests began and lasted through the afternoon of the next day.

The sit-in was followed by a strike and a meeting of the university community called by the president in the Greek theater at the end of which Mario Savio when he rose to make an announcement, was seized by the throat and dragged from the platform by three police men, an incident which freshly aroused the students, shouting "Let him speak! Let him speak!" The following day 900 faculty members attending a session of the academic senate voted 824 to 115 in favor of a resolution against control of student speech and political advocacy: Regulations about time, place and manner of political activity were to be only such as are necessary for the normal functioning of the university and disciplining of students in regard to political activities was to be in the hands of the faculty as the final authority. The FSM, viewing this proposal as an endorsement of the objectives they had been fighting for, immediately supported it. The Associated Students of the University of California (the official student government) did likewise.

On January 2 the Board of Regents named a new acting chancellor. Things quieted down in the second semester. The new chancellor appointed a Select Committee of the Academic Senate which was to make a careful examination of the academic and non-academic situation of the students at Berkeley. This committee under the chairmanship of of Professor Muscatine worked for a full year and in March of 1966 published its report[4] which called for many changes, including the establishment of a Board of Educational Development which was to be an agency of constant innovation and self-examination. Also, in the spring of 1965, Professor Tussman was given permission to start his experimental program involving radical changes in the academic program for the freshmen and sophomore years. This program was put into operation in the fall of 1965 with a first group of 150 students.

A committee of the Board of Regents appointed Jerome C. Byrne, a lawyer, to prepare a special report on the recent events and to make proposals for reform. The report by Byrne and his staff, published in May 1965, concluded among other things that

> "the Free Speech Movement enjoyed widespread support among students on the Berkeley campus. The large numbers participating in the various demonstrations established this fact. A reliable survey of student opinion, which we have had reviewed by independent experts, concludes that, before the December sit-in, about two-thirds of the students said they supported the FSM's objectives and about a third supported its tactics. Subsequent surveys showed that support increased after the September sit-in." (Upon its publication the Byrne Report was strongly criticized by some of the Regents.)

While these events were going on at Berkeley, many other institutions across the country were experiencing students protests. According to a survey made by Richard E. Peterson of the Educational Testing Service, based on 849 accredited four-year institutions, 38% of the colleges reported student protests over the issue of civil rights. Smaller percentages reported protests in the area of instructional quality, with 12% reporting protests over poor quality of instruction, 8% over the generally prevailing system of testing and grading, 7% over curriculum inflexibility.[5] Just as at Berkeley, it seems that students were mobilized in larger numbers over political issues than over educational ones. Nevertheless, it would have been interesting to have the same survey repeated for 1965-66. From impressions gathered by us in 1965-66 through the observation of campuses and reading the student press, it seems that larger numbers of students have become involved in educational issues and that these students are more representative of the broad mass of students.[6]

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[4] Education at Berkeley. Report of the Select Committee on Education, Berkeley, 1966.

[5] Peterson, Richard E. The Scope of Organized Student Protest in 1964-1965. Princeton, New Jersey: Educational Testing Service, 1966.

Some Implications

Underneath the specific chain of events at Berkeley there are more superficial and deeper causes of the student revolution. On the more superficial side were lack of administrative flexibility and sensitivity and inadequate channels of communication between administration, faculty and students. More deeply there were (and are) such factors as increasing pressures for high academic performance, preceded by similar pressures in high school and succeeded by the prospect, as required schooling lengthens into graduate institutions, of continuing years of being subjected to grading and testing. These more demanding standards are particularly hard for the student to accept because there has been no commensurate attempt to make the contents of the requirements more meaningful to him by relating them more fully to his own purposes, interests and motivations. Further, there are the pressures and confusion over the military situation with the ever-present possibility of the draft which makes staying in school a necessity and prevents the often desirable opportunity of a temporary break for work, travel, or self-renewal. Swelling numbers of students, due to the higher birth rate and greater affluence, have enormously increased the size of universities with no attendant attempt to decrease some of its dehumanizing affects.

Among the "positive" determinants of students activism are economic affluence with its opportunities for the commodities and style of life that enhance the sense of oneself. There is the confidence gained by students at such prestige institutions as Berkeley by the academic successes they have achieved in their previous schooling. There is the experience of the civil rights movement which not only gave the students training in the tactics of dissent but also gave them a new sense of the power of individuals, or at least groups of individuals, to influence the course of social and political events. There also in the 60's has been considerable mitigation of the "McCarthyism" which threw a pall over political life in the 50's. Moreover, after 20 years of affluence some kind of stock-taking of values is now taking place. Economists like

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[6] See Katz, Joseph and Nevitt Sanford. The New Student Power and Needed Educational Reforms. _Phi Delta Kappan_, 1960, _47_, 397-401.

Galbraith began it years ago. Some members of the present college generation, at their critical juncture in life, are taking a more fundamental look.[7]

Reactions to the events at Berkeley have varied considerably, from those who see them as a breach of law and order to those who consider the FSM as pioneering a social renewal. In between, observers have pointed out the similarity of the FSM to previous protest movements in America and other educational history, while others have viewed it as one more instance of the conflict between generations and of adolescent rebellion.

Historical and psychological interpretations of the FSM have relevance. At the present, just as in the past, social circumstances can be favorable to the universal tendency of adolescents to establish their own identity more firmly by simultaneously differentiating themselves from their parents and by redefining and modifying social institutions which they perceive as hampering human growth. In this lies the particular contribution that adolescents can make to the self-renewal of society.

But the FSM may also be the first sign of a new form of consciousness in student society, just as labor acquired a new form of consciousness during the last 100 years. Conceivably the relationship between educators and educated is in the process of redefinition, with a much larger degree of participation by the student. It may mean not only a shift of who determines what about educational content but also an earlier assumption of autonomy by the young, a redefinition of the role of student in which he is integrated into the work, social and political processes of the society in an active manner, rather than being primarily a tacit consumer of culture and one who develops academic or social skills now for later use.

Characteristics of the Students who were Arrested

The following report is based upon 62 Berkeley seniors (35 men and 27 women) who were arrested during the December 2 sit-in. The names of these students were obtained by checking the list of those arrested against our master list of all entering Berkeley students in the fall of 1961, and 62 was the total obtained. We have Scholastic Aptitude Test data for 61 of these students, senior year cumulative grade point averages for 47, freshman Omnibus

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[7] For a more detailed discussion of the causes of the student revolution see Katz, J. and N. Sanford. Causes of the Student Revolution. Saturady Review, December 18, 1965, 64-66, 76, 79.

Personality Inventory (OPI) data for 42, senior OPI data for 23 and Senior Questionnaire data for 22. In our longitudinal interview sample we had five of these students and we interviewed an additional six who were not part of the interview sample.

Personality Inventory Data

Forty-two of the arrested students had been given six OPI scales, the Authoritarianism (F) and Ethnocentrism (E) scales when they entered as freshmen in 1961, and 23 of them also responded to these same scales in the spring of 1965. The arrested men and women (Table I) differ from their classmates as freshmen by scoring significantly higher on scales measuring Social Maturity (e.g., autonomy, flexibility, capacity to relate well to other people), Impulse Expression, Estheticism, and Developmental Status. They score about the same as their classmates on a scale measuring Schizoid Functioning (social alienation and bizarreness of thinking). The men score lower than their classmates on a scale measuring Masculinity-Femininity. (This scale is somewhat mislabeled and tends to measure interest; that is, low scorers express less interest in science and more in social and esthetic matters; they also admit to more awareness of adjustment problems and feelings of anxiety.) The arrested students score significantly lower than their classmates on scales measuring Authoritarianism and Ethnocentrism. (Table II)

If one compares the personality scale scores of the arrested seniors with those of their classmates, the same differences were obtained as were obtained in the freshman year. (The difference between the two senior men groups on "masculinity," though about half a standard deviation, does not reach statistical significance, however.) The FSM students thus continue to rise on the personality measures between their freshman and senior years and are considerably ahead of their fellow seniors.[8]

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[8] Our data are in line with the data reported by Heist and Watts and Whittaker. (Heist, Paul. Intellect and Commitment: The Faces of Discontent. Berkeley: Center for the Study of Higher Education, 1965 (mimeographed); Watts, W. and D.N.E. Whittaker. Free Speech Advocates at Berkeley. *Journal of Applied Behavioral Science*, 1966, *2*, 41-62.) Our own results enlarge on theirs by including personality inventory data for FSM students at the time of their *entering* Berkeley in 1961. Heist and Watts and Whittaker, reporting on several samples of members of the FSM, including a sample of 130 arrested students, show that the FSM students score considerably higher both on cognitive and affective personality scales when compared with samples of other Berkeley seniors. Thus they score higher on such measures as Thinking Introversion, Theoretical Orientation, Estheticism, Autonomy, Impulse Expression. (Footnote continued on page 577.)

Comments

The FSM students are different from their fellow students already upon entrance. Their capacities for autonomy, awareness, and action are considerably higher than those of most of their classmates. One might raise the question, therefore, whether their personality characteristics rather than the influence of the university has propelled them. But we know that students with such characteristics have entered colleges for a long time. Personality characteristics are only a potential. An environment, other than Berkeley in 1962-63, may not have influenced them as much in the direction of increasing social awareness and capacity for self-exploration, and certainly of social action. One may even surmise that under other conditions this psychological potential may have turned more in the direction of cynical rebelliousness or isolation.

In interpreting the high scores of the FSM students on Social Maturity and Impulse Expression, our interviews of people who have been measured by these scales has led us to the belief that high scorers on these two scales tend to include a large proportion of people who are conflicted and have an eventful history in trying to resolve their conflicts. Interview and questionnaire data confirm this for the FSM students. They tend to come from family backgrounds where there has been more dissent than in other families and their histories in college often show much turmoil. At the same time these students also show a high degree of self-awareness, capacity of criticizing themselves, seeing themselves in perspective and reintegrative powers. While they project some of their conflict onto the outer world, they also are particularly keen observers of conflicts, discrepancies, and absurdities in the outer world. (One might argue that from the point of view of society and its perennial needs for reform and self-renewal, people with these personality characteristics are particularly suitable for pointing out existing shortcomings and initiating reforms. In the process they serve themselves as well as society.)

(Footnote 8 continued) These authors also report that FSM students who participated in the Sproul Hall sit-in included Humanities and Natural Science majors in about the same proportion as the rest of Berkeley: the social sciences had a larger representation in the FSM than in the rest of the student body; but only 1.3% of the FSM respondents were majoring in Business and Engineering while 17.8% of the student population did so. The educational background of the FSM respondents also is different. 25.5% of the FSM students had fathers who had advanced academic degrees (M.A. or Ph.D.) while only 10.8% of a random sample of the Berkeley student population did so.

TABLE I

SCORES ON EIGHT PERSONALITY SCALES OF ARRESTED MEN STUDENTS AND SAMPLES OF BERKELEY FRESHMAN AND SENIOR MEN

	Freshmen							Seniors				
	Arrested[1] (N=10) Mean	(S.D.)	Arrested (N=20) Mean	(S.D.)	Non-Arrested (N=1026) Mean	(S.D.)	p[2]	Arrested (N=10) Mean	(S.D.)	Non-Arrested (N=286) Mean	(S.D.)	p
Social Maturity[3]	60	(11)	61	(9)	50	(10)	<.001	67	(8)	57	(11)	<.01
Impulse Expression	55	(10)	57	(9)	50	(10)	<.01	62	(10)	52	(11)	<.01
Schizoid Functioning	52	(9)	52	(8)	50	(10)	n.s.	52	(12)	47	(11)	n.s.
Masculinity Femininity	44	(7)	43	(8)	50	(10)	<.01	42	(9)	47	(13)	n.s.
Estheticism	60	(9)	61	(8)	50	(10)	<.001	65	(7)	52	(12)	<.001
Developmental Status	59	(13)	60	(11)	50	(10)	<.001	69	(9)	58	(11)	<.01
	(N=11)		(N=19)					(N=11)				
Authoritarianism[4]	93	(25)	92	(26)	116	(26)	<.001	70	(29)	96	(26)	<.01
Ethnocentrism	45	(18)	42	(15)	56	(21)	<.01	30	(16)	44	(18)	<.02

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[1] These are the students for whom we have both freshman and senior personality test responses. As can be seen the two groups (freshman-senior and freshman only respondents) respond in nearly identical fashion.

[2] p is for the difference between arrested students (N=20) and the non-arrested (N=1026).

[3] This and the following five scales are reported in standard scores. The standard scores were computed separately for each group on the basis of their freshman scores. A standard score of 50 is the mean raw score on each scale for the total male (N=1026) and total female (N=852) populations, respectively, tested in 1961. The following are percentile equivalents of the standard scores: 50 = 50, 55 = 70, 60 = 84, 66 = 95, 70 = 98.

[4] This and the following scales are reported in raw scores. The number of arrested students for whom we have these responses is slightly different from the other scales.

TABLE II

SCORES ON EIGHT PERSONALITY SCALES OF ARRESTED WOMEN STUDENTS AND SAMPLES OF BERKELEY FRESHMAN AND SENIOR WOMEN

	Freshmen							Seniors				
	Arrested[1] (N=13) Mean	(S.D.)	Arrested (N=22) Mean	(S.D.)	Non-Arrested (N=852) Mean	(S.D.)	p[2]	Arrested (N=13) Mean	(S.D.)	Non-Arrested (N=265) Mean	(S.D.)	p
Social Maturity[3]	60	(10)	60	(9)	50	(10)	<.001	66	(7)	58	(10)	<.01
Impulse Expression	57	(8)	55	(9)	50	(10)	<.05	59	(9)	52	(11)	<.02
Schizoid Functioning	47	(9)	47	(9)	50	(10)	n.s.	46	(12)	46	(11)	n.s.
Masculinity-Femininity	47	(8)	48	(10)	50	(10)	n.s.	49	(9)	48	(10)	n.s.
Estheticism	56	(10)	56	(8)	50	(10)	<.01	62	(8)	53	(10)	<.01
Developmental Status	60	(10)	59	(9)	50	(10)	<.001	69	(8)	59	(11)	<.01
	(N=9)		(N=20)					(N=11)				
Authoritarianism[4]	87	(33)	81	(24)	113	(27)	<.001	70	(13)	89	(26)	<.02
Ethnocentrism	32	(12)	33	(9)	50	(18)	<.001	27	(4)	39	(16)	<.02

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[1] See footnote 1, Table I

[2] See footnote 2, Table I

[3] See footnote 3, Table I

[4] See footnote 4, Table I

The FSM students reinforce impressions obtained with other students that a certain amount of dissent or even disagreement between parents and within the family is an incentive towards achieving greater autonomy. It is as if the expression of difference among their parents allows the child emotional freedom to explore his own individual inclinations and to express them. (Where, however, parental conflict is more hostile or responded to by the child with a greater degree of hostility, the child's attempts at self-assertion seems also to become more tortured and diffused.)

In line probably with the reported fact that the parents of FSM students had more advanced academic degrees, we found that many parents of our interviewees turned out to have a history of involvement with more unorthodox ideas or actions.[9] This is of special interest in the light of the fact that the FSM students were particularly assertive in their rejection of adult authority, the middle-class way of life, and claim that no one over 30 could be trusted. They seem, at the same time, to attempt to realize their parents' ambitions--ambitions their parents had to suppress in part because of the depression and its aftermath. They criticize authority by way of a purer version of the values that their parents also hold. We found that the arrested students received moral support from their parents. As the mother of one of the interviewees, when notified of her daughter's impending arrest put it: "As your mother I'm worried and frightened for you, and I wish you wouldn't do it. As a person, I support your position. And as both, I am very proud of you."

Academic Measures

In academic aptitude and performance the arrested students turned out to score above the rest of their classmates. On the verbal part of the Scholastic Aptitude Test, the arrested students' mean scores were significantly higher when compared with those of the non-arrested seniors. (Table III) The spring 1965 cumulative grade point averages of the arrested men and women are significantly higher when compared with those of their fellow seniors. (Table IV)

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[9] Since this was written, Flacks has reported that data from two studies of his show that "activist students come predominantly from relatively liberal backgrounds." (Flacks, Richard. The Liberated Generation: An Exploration of the Roots of Student Protest. To be published in a forthcoming (1967) issue of The Journal of Social Issues.)

TABLE III

FRESHMEN SCHOLASTIC APTITUDE TEST SCORES FOR ARRESTED STUDENTS, RANDOM SENIOR[1] SAMPLES, AND ALL ENTERING FRESHMEN IN 1960.

	MEN						WOMEN					
SAT	Arrested (N=34) Mean (S.D.)	Non-Arrested (N=400) Mean (S.D.)	Diff.	t	p	1960[2] Freshmen (N=1857) Mean (S.D.)	Arrested (N=27) Mean (S.D.)	Non-Arrested (N=400) Mean (S.D.)	Diff.	t	p	1960 Freshmen (N=1494) Mean (S.D.)
Verbal	611 (81)	552 (84)	59	3.94	$<.001$	548 (93)	610 (101)	559 (88)	51	2.89	$<.01$	544 (86)
Mathematical	611 (86)	617 (76)	-6	<1	n.s.	606 (88)	535 (95)	531 (87)	4	<1	n.s.	519 (88)

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[1] Strictly speaking these are Fall 1961 entrants who are in school in the Spring of 1965. Some of these had not attained senior standing.

[2] 1960 scores of all entering freshmen are provided for comparison purposes.

TABLE IV

CUMULATIVE GRADE POINT AVERAGES IN THE SPRING OF 1965 OF ARRESTED SENIORS AND OF RANDOM SENIOR[1] SAMPLES

	MEN					WOMEN				
	Arrested (N=25) Mean (S.D.)	Non-Arrested (N=400) Mean (S.D.)	Diff.	t	p	Arrested (N=22) Mean (S.D.)	Non-Arrested (N=400) Mean (S.D.)	Diff.	t	p
GPA	2.93 (.40)	2.64 (.45)	.29	3.08	$<.01$	2.87 (.38)	2.65 (.39)	.22	2.54	$<.02$

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[1] See Footnote 1, Table III

Thus, even by conventional academic standards, these students belong to the more highly achieving ones in the university.[10]

Attitudes and Behavior

In looking at the Senior Questionnaire responses (Table V) of the arrested students the picture that emerges is that of a group of students who describe themselves more frequently than their peers as having been greatly influenced by ideas presented in courses and by teachers, and by close relations with teachers and other adults. In taking courses they describe themselves as primarily oriented towards their intellectual contents (though for the men this difference does not reach statistical significance). They describe themselves more frequently as having changed much in personal characteristics, freedom to express their feelings and desires and their political views. They report greater struggle and conflict than their classmates in deciding on a major. They disagreed more frequently with their fathers and report their parents more frequently as strongly differing with each other.

There is little difference between the arrested and non-arrested students in their reported participation in social activities, but not unexpectedly the arrested students have participated in civil rights activities and national or community political activities much more frequently than their classmates.

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[10] Our data are in conflict with those reports by Watts and Whittaker, op. cit, in which there was no significant difference between the Fall 1964 GPA of 137 FSM undergraduates of all classes (2.62) when compared with a cross-section of 115 undergraduates (2.53). Our own data are corroborated by those reported by Heist, op. cit, by those collected by Somers, a Berkeley sociologist, and by another survey cited by him (See Somers, R.H. The Mainsprings of the Rebellion. In Lipset and Wolin, op. cit. p. 344.

Further corroboration of a link between high academic performance and activism comes from Robert Nichols who reports that self-ratings and ratings by teachers and peers "all agree in characterizing Merit Finalists more frequently than less able students as independent, assertive, unconventional, cynical, rebellious and argumentative." They are also described more frequently as "mature, dependable, well-adjusted and honest." Merit Finalists "report more involvement in campus political activities, more organizational and leadership positions, and more discussion of political, social and religious issues with teachers and peers than do samples of average students." It is amazing how much this picture of the Merit Finalists agrees with our picture of the FSM students. (Nichols, Robert C. The Origin and Development of Talent. National Merit Scholarship Corporation Research Reports. 1966, 2, No. 10, 7.)

The arrested students are much more permissive in sexual *attitude* than their classmates, but in *behavior* only the arrested men and not the women report a higher degree of sexual intimacy during college. A similar sex difference shows up in regard to drinking behavior where the arrested women are much like the non-arrested ones.

In other questionnaire responses (not reported in Table IV) a number of things are to be noted: The heroes of the arrested students tend to be civil rights leaders and such literary figures as Hesse, Melville, and Orwell. The educational plans of the arrested students focus on subjects and occupations that involve other people and social objectives. Thirteen out of the 22 plan to do graduate work in education, social science, and social welfare. Thirteen also plan to be engaged ten years after graduation in teaching, social work and social research. The arrested students also indicated a greater interest in the Peace Corps than their classmates.

After their freshman year most of the arrested students lived off-campus, rather than in university housing. The arrested students express dissatisfaction with the university administration more strongly than the rest. 100% of the men say that they are *very* dissatisfied with the relations of the administration to the students, while only 26% of their classmates are *very* dissatisfied; 63% of the women are *very* dissatisfied while only 22% of their classmates are. (But an additional 33% of the men and 25% of the women are moderately dissatisfied. In response to an open-ended question half of the arrested students call for more personal communication between administration and students and the other half call for more due process and student participation in or control of decision-making and policy.

An intense and aware struggle in reaching their present phase of development is reported by the arrested students. The women put developing their identity as a person on top of other values (8 out of 11 ranked it first). Table V indicates (though it does not reach statistical significance) that the men report themselves more frequently than their classmates as greatly influenced in their development by gaining understanding of themselves as persons, crises in their relationships to other people, and confrontation with problems in themselves. As we have already seen, the arrested students report themselves more often than their classmates as having differed with their fathers; they describe themselves more frequently than their fellow students as having engaged in a struggle of conflicting thought and feelings when deciding on a major, and they say they have changed much in their freedom to express their feelings and desires. In response to an open-ended question, half of the arrested students stress their gains in self-respect, self-knowledge, and sense of security. The other half stress their

TABLE V

QUESTIONNAIRE RESPONSES OF ARRESTED SENIORS AND SAMPLES OF BERKELEY SENIORS

	MEN			WOMEN			Men and Women Combined^2	
	Arrested (N=11) % (N)	Non-Arrested (N=251) % (N)	p^1	Arrested (N=11) % (N)	Non-Arrested (N=240 % (N)	p^1	X^2	p
A. Activities Frequently Engaged In								
Reading non-fiction	45 (5)	52 (131)	n.s.	82 (9)	67 (157)	n.s.		
Reading fiction	55 (6)	32 (76)	n.s.	64 (7)	48 (113)	n.s.		
Civil rights activities in or near school	45 (5)	4 (6)	$<.001$	55 (6)	5 (7)	$<.001$		
National or community political activities	36 (4)	4 (6)	$<.01$	27 (3)	2 (3)	$<.001$		
Social activities, parties, etc.	36 (4)	35 (87)	n.s.	36 (4)	41 (97)	n.s.		
Sports activities as a spectator	9 (1)	44 (113)	$<.05$	0 (0)	35 (86)	$<.05$		
Sports activities as a participant	18 (2)	29 (84)	n.s.	0 (0)	16 (41)	n.s.		
Church attendance and/or church-connected activities	0 (0)	18 (46)	n.s.	0 (0)	26 (62)	.10	6.1	$<.02$

	Arrested % (N)	Non-Arrested % (N)	p	Arrested % (N)	Non-Arrested % (N)	p	Men and Women Combined X^2	p
Frequent or occasional praying	9 (1)	33 (86)	n.s.	9 (1)	51 (125)	<.01		
Consumption of beer one or two times a week	45 (5)	30 (73)	n.s.	27 (3)	16 (36)	n.s.		
Consumption of hard liquor one or two times a week	36 (4)	14 (34)	n.s.	0 (0)	13 (33)	n.s.		
Drunk more than twice during senior year	82 (9)	41 (102)	.02	27 (3)	17 (41)	n.s.		
B. Factors that Students Say Greatly Influenced Them to Change								
Gaining understanding of self as a person	64 (7)	42 (103)	n.s.	64 (7)	63 (151)	n.s.		
Confrontation with problems and conflicts in self	64 (7)	38 (93)	n.s.	64 (7)	56 (133)	n.s.		
Crises in relations to other people	45 (5)	18 (43)	.08	36 (4)	36 (87)	n.s.		
Participation in activities directed to social or political improvement	45 (5)	7 (13)	<.01	45 (5)	10 (19)	<.01		
Ideas presented in courses or by teachers	64 (7)	22 (50)	.01	45 (5)	27 (64)	n.s.	11.0	.001
Close relations with teachers or other adults	27 (3)	6 (13)	.06	45 (5)	14 (31)	<.05		

	Arrested % (N)	Non-Arrested % (N)	p	Arrested % (N)	Non-Arrested % (N)	p	Men and Women Combined X^2	Men and Women Combined p
C. Areas in Which Students Reported Great Changes During College								
Intellectual interests	73 (8)	53 (130)	n.s.	73 (8)	64 (154)	n.s.		
Personal characteristics	64 (7)	32 (78)	.06	45 (5)	42 (100)	n.s.	4.2	$<.05$
Freedom to express feelings and desires	55 (6)	38 (93)	n.s.	73 (8)	44 (103)	n.s.	5.0	$<.05$
Political views	55 (6)	31 (74)	n.s.	36 (4)	24 (56)	n.s.	3.9	.05
D. Academic Orientation; Major and Career Decisions								
Course work most important for its intellectual interest	64 (7)	38 (93)	n.s.	91 (10)	61 (143)	.06		
Grading system resented or prevented trying out additional courses and fields	64 (7)	37 (89)	n.s.	55 (6)	35 (79)	n.s.		
Great struggle and conflict in deciding on major	45 (5)	26 (62)	n.s.	55 (6)	29 (65)	n.s.	6.3	$<.02$
Great struggle and conflict in planning life's work	45 (5)	34 (84)	n.s.	55 (6)	33 (77)	n.s.	2.8	n.s.
Considering Peace Corps	55 (6)	27 (66)	n.s.	36 (4)	28 (65)	n.s.	3.8	.05

	Arrested % (n)	Non-Arrested % (n)	p	Arrested % (N)	Non-Arrested % (N)	p	Men and Women Combined	
							X^2	p
E. Reported Difference of Students with Their Parents and Parents' Disagreement with Each Other								
Disagreeing frequently with father	73 (8)	29 (68)	.01	36 (4)	26 (61)	n.s.	8.6	$<.005$
Disagreeing frequently with mother	55 (6)	28 (68)	n.s.	18 (2)	27 (65)	n.s.		
Parents strongly differing in their views	64 (7)	27 (66)	$<.05$	45 (5)	33 (78)	n.s.	7.9	$<.01$
F. Sexual Attitudes and Behavior; Going Steady								
Strong agreement that full sexual relations permissible to the male before marriage	91 (10)	35 (82)	$<.01$	91 (10)	31 (68)	$<.001$		
High degree of sexual intamacy during college	64 (7)	24 (56)	.02	36 (4)	33 (79)	n.s.		
Going or having gone steady during college	82 (9)	52 (127)	.08	73 (8)	66 (155)	n.s.		
Close relations with friends of the opposite sex as a major source of change	64 (7)	32 (78)	.07	45 (5)	57 (138)	n.s.		

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[1] These are 2-tailed probabilities for exact tests comparing arrested and non-arrested students. The probabilities are approximations since it is difficult to obtain precise 2-tailed probabilities for the exact test. (See McNemar, Quinn, Psychological Statistics, 3rd ed., New York: Wiley, 1962, 237-238.

[2] Wherever men and women are combined, there were no significant sex differences in the responses of the non-arrested students.

increase in intellectual interests and ability. Half of them single out their participation in the FSM as an important influence for change. The other half is divided between professors and friendships as an important influence.

Further Implications

The arrested students have come face to face with dissent and their passage through college has been a more stormy one. But their struggles and conflicts go together with enlarged awareness and active attempts at achieving integration. There are paradoxes in their lives in that they feel in disagreement with established authority and yet have been supported either by their parents directly or by their parents' values. They organized themselves, temporarily, in a movement. But they have great reservations about organizations and bureaucracies because these have the power of thwarting the expression of individuality. Thus, as we have indicated, the FSM was a movement at times well-organized and at times almost breaking apart. Its participants frequently saw themselves as Thoreau-type individualists who could join a movement only for a very limited time. In that they differ much from the student activists of the 1930's who accepted political organization very much more readily. The current activists are almost conservatively American in their emphasis on individual autonomy. The contrast between the political and economic objectives of the activists of the 1930's and the more broadly humanistic and educational objectives of the activists of the 1960's is a big one.

The "paradoxes" we have just noted do not point so much to inconsistency and conflict but to the attempts of the activists not to be impaled on either horn of such dilemmas as the need for joint social action and for individual freedom or the need to have adult models to guide themselves by and yet not be constricted by excessive acceptance of them.

The desire for meaningful human contact is especially marked. In spite of their attacks on authority, these people have closer relationships to teachers and other adults than the rest of the students. Having closer relationships with peers and being able to do something for other people are particularly important objectives for them. Especially when they stress doing things for other people, the activists mean to suggest a serious deficiency in present undergraduate education which at its best seems to aim at preparing the person for better individual performance and to neglect, particularly in the academic sector, experience both in concerted action and in action that serves or is of use to other people. In spite of the appearance of gregariousness that colleges give, particularly residential ones, there is much social isolation and distance for many students. As one of our FSM interviewees remarked, the possibility of establishing closer relations with other students was a powerful secondary motivation in joining the movement. "A lot of honest relationships were made...it was great because you had 'instant relationships', all the things that normally take days or weeks to find out about a person, you already discerned..."

There is an orientation in these people towards seeing the world outside of their selves more clearly. They try to see the world objectively in its state of complexity while at the same time not being inhibited in attempting to do something about remedying the situation. They have experienced conflict in others and themselves. But this conflict seems to have sharpened their perception. Unlike the "neurotic" they have not turned to a frustrated self-involvement but towards community and the world. One might say that these students need to make the world whole in order to make themselves whole; so that psychological and social objectives are brought into some harmony.

Adolescence is a particularly good time for aiming at such psychological and social wholeness. It is the time in which the person can remake himself in ways different from the possibilities and limitations established in his prior upbringing. In their search for a new person adolescents invariably manage to touch upon factors that are inadequate in their environment--it is adult immaturity that tries to dismiss them as idealistic, impractical, or merely rebellious. Adolescent dissent gives society a tremendous chance. By vittue of their less encumbered vision and relative non-commitment to the established order adolescents can make a major contribution towards society's self-renewal. (As a student writer pointed out recently, we have stressed very much the contribution of universities to society, but not enough their role in criticizing and reforming society.)

The protest of the students actually put its finger on many deficiencies in educational reality which had been neglected by faculty and administration. It would be missing much of the significance of this protest to think of it primarily in "house-keeping" terms, e.g., deficiencies in channels of communication or in "legal" arrangements. The fundamental thrust of the student protest is due to a more or less deep dissatisfaction with the educational process, in content, methods, and personnel, its inadequacies in meeting the students' developmental needs, including their intellectual ones. It is also conceivable that the activists have initiated a redefinition of the college adolescent's role, moving towards earlier autonomy, earlier participation in the social and political processes, including education, and earlier usefulness to other people.

An Individual Case

The case of the following arrested student who was interviewed by us has the special advantage that our interviewee seemed to be arriving at his moment of decision during the very night of the sit-in; so that he may be describing in a condensed form what took place over longer periods of time for other students. Of course for our student, too, the decision preceded by a long period of gestation was not sudden. The interview took place on June 11, 1965, and he was among other things asked for a retrospective account of the night of the sit-in of December 2. One of the characteristic features of his description is that his essential commitment to permit himself to be arrested not only came from a sense of public responsibility of contributing to reform and underlining the injustices of existing conditions but also was seen by him as essential for establishing his own personal and private integrity. He was very aware of the possible external consequences of his act for himself, but he saw the situation as requiring a choice between his becoming an adult that he could respect vs. diffusing and diluting his own life.

In quoting from the interview, we will focus on the student's process of arriving at his decision but we will also include some of the things he says about what was going on around him. The background, in parts macabre, blends with the internal process. There is an existential feeling about the report given by the student who is a science major. His account of his attitudes and behavior during the night of the sit-in (and the others we have collected) clashes sharply with many newspaper-engendered images of these students, images which themselves fed into an adult stereotype of the adolescent's dangerousness and tendency to delinquency. One also wonders as one reads our interviewee's description of the brutalities he experienced and witnessed during the night of the sit-in whether it was not quite an education for him to be confronted with the seamy underside of men and the fabric of society, to be brought face-to-face with the evil in people and institutions. Such an experience with the "dragon" has for a long time in myth been described as the "ordeal" necessary as a preparation for adulthood. William James had something similar in mind when in his Moral Equivalent of War he called for a confrontation of the young with the "sour and hard foundations" of man's higher life. For purposes of such confrontation society is not likely to run soon out of material illustrating injustice and stunted development. But one might perhaps expect the university to provide help and comfort in this confrontation rather than being itself the scene of it.

Our interviewee, we will call him Tom, heard about the sit-in in the afternoon of December 2. He had missed the rally, but in his opening remarks he referred to the speech by Mario Savio from which we quoted earlier in this chapter. He originally planned to spend only some time with the sit-in, particularly because he had classes the following day--attending classes takes precedence over revolution.[11]

> "I didn't hear the rally that day, the one where Mario made his speech, a very good speech, beautiful metaphors. But I missed that and I didn't even know that there was a sit-in til about 5:00 in the afternoon. I happened to be walking to the student store, and so I found out pretty fast, and I turned around and walked home. I went back and made three or four sandwiches and put on two jackets that I could use as a pillow and brought a Latin vocabulary card so I could study. There was, of course, no commitment to stay, but I definitely wanted to go in. I met a few people in there, my brother-in-law included. We talked, sat around. That was a messy period, probably the most confused period, because people were in there milling around. It was about 5:30, maybe a little bit later, they hadn't closed the doors yet, so the people were walking inside and out. But after they closed the doors, about 7:00, people were still milling around and doing various things and began to get more organized. They started to have, it was some Jewish holiday,....The Rabbi comes down and he's conducting a service. It was very good. Then various people were breaking up, they were serving coffee and I had run out of cigarettes again. So they sent down to the store and had someone buy two cartons of cigarettes and put them in a bag and threw them up.
>
> "I was just amazed at the organization of the whole thing. It had been planned before, all the various aspects including what to do about bathrooms, what happens if people get sick. They had all these things planned: How to get food in and out, what types of food, how much; cigarettes, coffee; what to do with the waste paper; it was amazing. It turned out at the most crucial period during the whole sit-in they didn't have communication. When they had isolated us, we didn't have windows to look out, we were surrounded by police so we couldn't do anything. We had no connection with the outside for about 12 hours so we didn't know what was going on, and that became kind of horrible for us after a while because of this one idea that, I think, popped into everyone's head: this action that you're

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[11] In the following excerpts from the taperecorded interview slight editorial changes have been made for the sake of readability.

> doing personally has a meaning for you, but it has a meaning outside of you and whether you're going to be a martyr or a traitor is very slim that divides the two.
>
> "So we didn't know what was going on. And then I watched the Charlie Chaplin movies which were good, and I studied Latin for a couple of hours, talked to various people all around, and then started to find a corner somewhere where I could sit down and start to go to sleep. Then about 1:30 in the morning newspaper reporters kept coming up and taking everyone's picture, and turned on these great big flood lights, and everyone was screaming obscenities all over the place, because they wanted to get some sleep. I felt that I would stick out the night, but I had an eight o'clock class the next day and I was going to it; so I would do my part for the protest and stay the first night and then if I could come back, I would the next day, but I was not going to miss my classes. Of course I didn't consider seriously the possibility of being arrested. From a logical stand point it was the most ridiculous thing to do. It would essentially have made us all martyrs, which it did. It would have given the protest a great deal of popularity including the professors, which again it did. So I would say that logically the best thing for the administration to do was to let us sit there, and I'm sure that let's say 400 people would have walked out by 10 o'clock the next day, just because of classes; it would have lost all its emotion and probably would have been a tremendous failure. Well I can't say that for sure. It just would not have been a climax. So, therefore, the administration would do the most logical thing and not arrest people. Well, of course, I didn't realize what the administration was composed of, and I didn't realize that they were very, really scared, frightened to death, and not very rational in making decisions, so again this leaves us with a particular insight into administrators. I'm a little more suspicious now than I ever was, a little more critical."

Around 2 o'clock Tom heard for the first time that the police were on their way. He says there was a very tense period from about 1:30 to 3:00 because he felt isolated and didn't know what was going on.

> "You have a general idea that the police are going to come. You don't know what they're going to do when they do come, and there's nothing you can do in the meantime. So there's a lot of tension going on, and again people are talking very nervously. They just didn't know what was about to happen. They had a lot of doubts and a lot of fears that came out too. But then someone again

> started singing, and this is a tremendous emotional relief during a time like this, and everyone whether he could sing or not was screaming and yelling out the civil rights song, which is all very comforting too, because it gives a feeling of unity."

Tom had been up since 6:00 a.m., December 2 and, as it turned out, it was going to be a long time until he was arrested in the afternoon of December 3. He described how during the night the students were all packed in like sardines and when about 5:30 a.m. he got up to go to the bathroom, it took him about 25 minutes to get there because he had to step between all the bodies of people. People were lying down, they were motionless and still, but they weren't asleep. "There was just too much doubt, fear and tension and you just couldn't sleep in that place. People weren't talking; they were just kind of lying and staring and thinking." So Tom sat down, just sitting and waiting and the following went through his mind:

> "I figured if I was going to get arrested, let's have it over fast, so I won't have a chance to change my mind. In my logic that was the worst thing that happened, because I was there from about 9:30, sitting in that position from 9:30 till 3 o'clock when they finally arrested me. So during that period I was just going over and over in my mind everything that happened up to that time, why I should get arrested or why I shouldn't, what were the arguments involved. One very strong argument was I had worked for the defense industry during one summer at college, I'd made a hell of a lot of money and, at that time a lot of money represented my freedom to me, so I wanted to be able to get a decent job afterwards; I didn't want to be discriminated on the grounds that I'd been arrested before, and that was one argument.
>
> "I wasn't sure how much my particular idea of the protest would be associated with the FSM's, so that was another thing that I was concerned with, because I wanted it to be a kind of tool of my arguments, I wanted to be able to express my individuality, and I just didn't know if this was going to have its effect. So again there was doubt in that area. But then after thinking over all these things I realized that the real motivating force was education, and that I really was not too happy with the idea of going to school for four years just to get a degree, so that you can go on and on and on, and so that you can get good jobs in society and stuff like that. This was the big argument between myself and my parents. They both graduated from college before the depression; so they both had degrees and it didn't

matter what the degree was in, what subject, they could get good jobs. So this became all important to them and perhaps the only concrete thing that they ever presented to me. So I realized then that this emphasis of getting a degree I wasn't happy with. I wanted the degree to mean something, I wanted it to represent a certain level of something that I had acquired after working for four years or fighting with myself for four years. So it finally occurred to me that here was a beautiful method, a beautiful way for me to rebel officially. I'd really had my freedom, been pretty independent all the way along, but I never established the type of rapport with my parents where they accepted me not as their son but as, let's say another individual, another adult, which is very important, so I finally felt that this was going to be in one way a protest against my upbringing. It was also a justified protest, it was a criticism that they could accept as something that they didn't realize the fact that they were striving for a degree instead of education. [As we have no other interviews with this student, it is not possible to determine whether his distance from his parents is as great as he here indicated.]

"I don't always like to be inside a jail, so I began to get kind of excited. About 2:00 to 3:00, it was about 2:30, I started getting this smile on my face which stayed with me throughout the night, I guess, because I was going to enjoy the period that happened and, so I began noticing things around me, mostly these stupid police officers. When they came up to our floor to arrest us again, they changed their techniques, they had apparently got some sort of arresting engineers up there to determine what would be the most efficient way to do these things...

"I was also very concerned about whether to go limp or not. In the beginning I could not see really what relation this had to the protest as a whole, could not see why delay was so important, especially since it had been going on so long, and the penalty for resisting an officer is a $2,000 fine and one year in jail, so, it's something to seriously consider...

"We had been given the phone number of a lawyer, if they asked. They didn't ask, they didn't inform us of our rights. So I didn't know what was going on because I had never been arrested before, and I didn't know when to ask for legal counsel, which we were also instructed to do. So by the time that I felt it was time to ask I was in mid-air.

But by the time that I had finally made certain decisions and come to an understanding of what I was doing and what I was about to do, I also began to see that going limp was important for other reasons too. Within the whole area of the protest, the sit-in, we had not accepted that authority, those laws that we were supposedly violating. When they came up to me there were four men all gathered around. One had a tape recorder, one was writing out a slip, one was reading a speech that had been prepared...He informed me that I was doing something against the law, and did I know it, and if I didn't leave I'd be arrested, something like that. No, yeah, he offered me an opportunity to get out, to get up and walk out now and I wouldn't be arrested or anything...I thought this was a contradiction, here I was under arrest and then I wasn't, and then he was giving me a chance to not be under arrest. So I asked him about it. I said I thought that I had already been under arrest and that I had been just waiting here to be taken out. He said, oh no, no, no, you know it's not like that at all, you can get up and walk out, do you want to? I said No. So he was a little bit upset by that, and he was a little bit flustered, didn't know what to do, but finally went back to his speech in the end. So, he started reading on and then they took my picture, and then got down to the last part of the speech which was, I'm trying to get the wording which was so beautiful, so poetic. Will you act like a gentleman and walk out with me? It was like that and I just about laughed. I didn't expect it to be this comical and I was kind of stunned there for a while because I didn't know exactly what to say...

"What I had noticed was that when other people went limp they were still scared and that they tensed up. Because of this they had gotten some kind of rough treatment. So when they grabbed me by the shoulders, two of them, and started grabbing me right here, on the shoulder blades, I felt these finger nails digging into my shoulders, so I just raised my arms and they grabbed me underneath the arms, which was nice, and I really went limp, I almost fell asleep. I'd been waiting, it was 12 hours in that one position and you know this was the end, the climax, and it was getting pretty exciting, but I guess I was so doubled by that time, my nerves were shot, oh, I'd been up 30 hours, something like that, it was unbelievable. But I was so limp they just dragged me across the floor and they got going at a good pace and picked me up and threw me and so I was off the groups for a couple of seconds at least, but by that time I

> just didn't give a damn what happened. I didn't care whether I fell on my head or what. It just so happens that I didn't tense up, and because of that I was caught by the Oakland police officers, two very nice gentlemen [sarcastic] who insulted me..."

About 3:30 in the afternoon Tom finally got out and was put on a bus to be transported to prison. As he sat down, everyone in the bus "turned around and looked for half a second or so and it kind of made me feel good at this time. They were saying that I may be doing something outside of myself which will be important outside of myself." His self-esteem and sense of usefulness thus bolstered, he began to feel anger and wondered how he could have been "so foolish as to think that these people (the police) would treat him like another human being instead of taking out their aggressions on you." The last person to get on the bus was another male. "They dragged him by his hair, I felt this was just going overboard; they're not being sane. Apparently he'd blacked out on the way down so they dragged him down by his hair instead of by his feet and he was just in a hell of a lot of pain when they got him out and put him in the seat."

They got to the Santa Rita prison farm, parked next to the booking office but were not let out of the bus. They sat there for about three hours, just discussing things and yelling and screaming sometimes. They struck up conversations with some of the police officers and asked them how they viewed the protest. They also posed the question what the officer would do if Governor Brown were his immediate commander and advised him to shoot us. The officer answered: "Well, of course not. I would be defying my own boss, but it would be because he was wrong and you don't deserve to be killed for doing this." Then a lieutenant got on the bus and said "You know what I think. I think all you bastards are commies, and this is a great big commie conspiracy. Now my daughter wanted to go to Berkeley but I'm not going to let her." The students replied: "Your daughter couldn't get into Berkeley."

By this time one of the big issues was when they were going to be let off the bus so they could go to the bathroom; they were tired and hungry. Eventually one of the officers went out of the bus and returned saying that he couldn't find any authorities so that they would have to stay in the bus.

> "So then we were all kind of ornery and didn't know what to do, and some were suggesting we protest, some were suggesting we climb out of the windows. So we divided up into debating teams, and somebody had a watch and was timing various arguments; so we had a debate. We had a ten-minute presentation on each side and after that we were going to vote on the action we were going to take. Everyone joined

> in on this and it made everyone feel better. Again it was very passionate, strong arguments that were going up. The two questions involved were whether we were going to be silent, so that we could get our way, or were we going to protest, so we could get our way. So after very long, again painfully democratic debate, we took a vote and it turned out to be pretty much 50:50. But the protestors had it over the non-protestors. So what we decided to do was to protest for eight minutes and then sit quietly for ten minutes and see what happens."

It was 8 o'clock by now, a clear night in the desert and the students expected that their yelling would go very far. They lifted up the windows and made as much noise as they could. The student women prisoners heard them in their barracks about 50 or 70 feet away and they too began screaming and yelling. This protest brought results; they were let into the station and given a sandwich each. Booking took another three to four hours. Then there was a small unventilated transfer cell into which 52 of the students were crowded for twenty minutes. Then they were let into the barracks but searching them took another hour. At 1:30 a.m., Tom finally got to lie down in his unheated bunk house.

Towards the end of the interview Tom's interviewer commented that he seemed to have a very good grasp of his whole involvement. Tom responded to this by saying:

> "Well, I'll tell you that I was frightened that if perhaps I didn't have a good grasp I would end up going slightly insane too, because the problems were immense. I could see around me that people were very confused, they knew emotionally and intuitively they were doing something, but they didn't quite see what, they couldn't articulate it rationally; even though it was the rational thing to do, they couldn't articulate it and that was quite a problem. Also at certain times I went back to doing some studying and I got left out on something that had occurred. I found it very difficult to find a straight story about what had happened, even from the official FSM statements which were often ambiguous and sometimes just wrong, incorrect, I couldn't trust them. I read them and then I compared them with what other people had to say. I tried to get a statement from the administration and then I found out again that they were so ambiguous you didn't know what was going on or what happened. So some of the important events that led up to such things as defying the October 2nd resolution and other things of that nature, it was very important for me to have a grasp of what has actually happened before I could actually support anything or not. So at the time if you didn't follow things specifically as they happened -

> it took quite a lot of energy to get out and sort them out - and if you didn't and the time came for action, and you want to participate but you didn't see things clearly and you couldn't justify it to yourself, there's a chance that you might hate yourself afterwards."

Finally, when the interviewer asked what Tom had been doing in his last semester at college, after the arrest, he once more illustrated the discontent with educational procedures that had been a major base for the FSM protest. Tom reports his studying a series of modern plays for a course. He seems to have gone about it in a workmanlike, critical, and analytic fashion, but he failed his first midterm. He failed, he thinks, because he did not conform to the abstract and, to him, superficial rules of test responses. He then "psyched out" what was wanted and performed better.

> "I used to read a lot of plays, but this was in high school, and I haven't for a long time, so I took a not very interesting English class and a course in modern British and American drama. I got to read up a lot on O'Neill and Shaw, and everyone else in between. It was very pleasurable, and my first midterm came back with a D minus on it. I didn't realize why. I finally found out that the way I was approaching it was taking each individual play and analyzing it, showing where actions between characters would create this characterization that would lead to a full knowledge of the characters itself, to a place where you can anticipate the next action, given any particular situation and then, how the actions of the characters relate to the theme of the play. But what they wanted, when you have to be tested on 18 plays in an hour, and you're given two questions, all you can do is say something that's general, and they wanted a general comparison of themes of plays. So after I'd figured out what they wanted, I could look at the plays both individually as units in themselves, and then as parts of other sets, and see general themes and comparing them. I think I did fairly well, but didn't require knowledge of any of the plays which was too bad."

In spite of his involvement in the FSM and the activities connected with his trial, Tom said that he "did quite a lot of thinking and learning academically even while participating full time in this other direction. Maybe too much time is bad for an educational system like this...The questions I ask myself and I find are important to answer, aren't necessarily the ones they are going to test me on." Tom seems to have to raise implicitly the question of motivation and, as we have found elsewhere in our study, students who otherwise complained of insufficient time would find they could easily take on a time-consuming additional task if it was meaningful to them.

As we have shown earlier, the strong intellectual interest and the intellectual independence shown by Tom is typical for the students arrested during the sit-in. These are the students that most professors would rate as very desirable because of their motivations and their intellectual industry. We are confronted with a revolt of the intellectual, not of the anti-intellectuals. These students have taken the claims of the university to be an intellectual community seriously - in part because of the very excellence of the university they have been attending - and they simply want more of it and want it better. There were students like this even during the so-called "silent generation" of the "apathetic" fifties, but their potential for involvement and activity did not meet with as favorable a situation. Perhaps education might develop a psychological Keynesianism which would awaken students in "apathetic" times through the stimulation of autonomy and dissent. But when students themselves offer their suggestions and dissent we should consider that an educational gift, a gift to their own education as well as to their teachers.

The activist students are a minority, though possibly an increasing one. There are many students who tend to accept their "education" passively and who get insufficiently touched, stimulated or awakened by their experience in college. The activists by their example have already helped to broaden these students' intellectual and valuational horizons. But more detailed attention to students different from themselves is likely to benefit the activists themselves. For in their often generous and enthusiastic nature many activists seem to consider other students too easily in their own image. They would grow in tolerance and gain an enlarged perspective on human nature if they realized that theirs is only one form of achieving identity and that other students may achieve their own particular "wholeness" in ways quite different from theirs. Intellectual awareness and excitement, enlarged social consciousness and reform-mindedness are "universals," qualities desirable in every educated person. In this lies the challenge and moral appeal of the activists.

Chapter XIII

THE 1966 STUDENT BODY PRESIDENT ELECTIONS AT STANFORD

Barry Sokolik, M.A.

This report is a condensation of a larger study which investigated the voting patterns in the Stanford student body elections for President in the spring of 1966. The primary campaign lasted for one week and out of eight candidates two emerged to do battle in the final election. One candidate was Robert Klein, a moderate, and the other was David Harris, a radical. Considering the moderate climate of Stanford, the decisive Harris victory that occurred one week later was rather unexpected. Mr. Harris commented, "I guess Stanford students wanted some kind of a figure to weld their dissent around." Through the information gathered in a questionnaire filled in by 140 students I have analyzed why students voted for Dave Harris for student body President. The evidence from my sample partially supports Harris' comment and also yields some interesting insights into the attitudes and perceptions of the students. Before turning to the results, it is necessary to briefly describe the basic proposals made by the two candidates.

Campaign Issues

Bob Klein was a well-dressed, clean-cut student who had been President of the Political Union. His platform rested on the belief that "student participation in the area of educational reforms" was the central issue. He advocated a voluntary pass-fail system outside one's major, a total re-examination of the curriculum and student advisors on the Board of Trustees. He felt Harris had "pseudo-utopian ideals" and that his approach to government was very misdirected. Klein continually stressed the need for cooperation and working within the normal channels to accomplish his goals. He conceived of education as "a continuous process of stimulating curiosity and commitment."

Dave Harris was the antithesis of a political figure with his blue jeans, old sport coat, Ben Franklin glasses, mustache and mop of hair. He was a sponsor in a freshman dormitory who entered the presidential race only to raise issues which he believed the other candidates should discuss. He felt that the other candidates were assuming the system was right and he did not. Harris believed Stanford was too paternalistic and heading in the wrong direction. He advocated elimination of any requirements except the necessary 180 units to acquire a degree, elections to the Board of Trustees based on a "one scholar, one vote" principle, and complete student regulation of their own conduct. For Harris, the two essential qualities of education were "equality based on a pure democratic model" and "a system which offers freedom bordering on anarchy." Harris proclaimed, "If we want changes in one year, not five to ten, we must act."

Procedure

Two hundred and twenty questionnaires were handed out to various students in all the living groups on campus one week after the election and 63.6% were returned (140). Though no set procedure was employed in disseminating the questionnaires, a cross section of the campus (fraternities, clubs, male and female freshmen and upper class dormitories) was sampled. The voting patterns in the primary and final election for my sample and the total voting population were very similar. My sample contained 110 voting students of whom 59.1% (65) had voted for Harris while 57.5% of the 3885 students who voted in the final election had voted for Harris. All the data were in a form that could be tabulated except the written explanation of the reason for voting and several optional questions. These answers were coded and a reliability check was made using the Spearman rank difference correlation coefficient and rho equalled .89. Thirty questionnaires were received from individuals who did not vote in the final election.

Results

There were significant differences between the Harris and Klein voters. The Harris voters described themselves as more liberal and saw the student body as more conservative than did the Klein voters. (Table I)

The Harris voters were more dissatisifed with (a) the education they were receiving, (b) the handling of policy concerning students by the administration, (c) the administration's understanding of students. Voters for both candidates were satisfied with the attitude of the faculty towards students and both were rather dissatisfied with the student body's attitude toward education. (Table II)

Several further results are worth noting. Thirty-seven per cent (23) of the Harris voters considered themselves moderate or conservative. Voters for both candidates perceive themselves as different from the student body; the Harris voters describe themselves as liberal-moderate and see the student body as moderate to conservative and the Klein voters describe themselves as moderate-conservative and see the student body as moderate to liberal. Finally, the students see the faculty as much more liberal than the student body and considerably less conservative than the administration.

TABLE I

RATINGS OF SELF, CANDIDATES, STUDENT BODY, ADMINISTRATION AND FACULTY ON RADICAL-CONSERVATIVE CONTINUUM

(Harris Voters N=60, Klein Voters N=44)

		Radical %	Liberal %	Moderate %	Conservative %	X^2/p
Self	Harris	3	60	31	6	.001
	Klein	0	11	46	43	
Harris	Harris	69	31	0	0	n.s.
	Klein	68	32	0	0	
Klein	Harris	0	8	63	29	n.s.
	Klein	6	11	78	11	
Student Body	Harris	0	16	49	35	.01
	Klein	6	36	57	7	
Administration	Harris	0	10	43	47	n.s.
	Klein	0	4	50	45	
Faculty	Harris	0	48	39	13	n.s.
	Klein	0	50	43	7	

Note: The male and female responses have been combined in this table. When the two are separated, the Klein men describe themselves more often as conservative and the Klein women more often as moderate. The Harris men describe Klein more often as moderate and the Harris women describe him more often as conservative. Both the Harris and Klein men describe the administration more often as conservative and the women more often describe it as moderate.

TABLE II

DEGREE OF SATISFACTION WITH EDUCATION, FACULTY, ADMINISTRATION, AND STUDENT ATTITUDES

(Harris Voters N=64, Klein Voters N=45)

		Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied	X^2/p
Education at Stanford	Harris	0	27	14	50	9	.05
	Klein	0	7	11	58	22	
Faculty Attitude to Students	Harris	0	18	21	41	20	n.s.
	Klein	0	9	18	53	20	
Administration Policy Concerning Students	Harris	0	31	36	23	10	.001
	Klein	0	11	13	65	11	
Administration's Understanding of Students	Harris	8	37	35	17	3	.001
	Klein	0	14	26	56	4	
Student Body's Attitude to Education	Harris	11	48	17	24	0	.10
	Klein	3	42	33	22	0	

Note: Male and female responses have been combined. Klein men are more frequently satisfied with the Student Body's attitude than Klein women.

The dissatisfaction of the students became slightly more delineated when the proposals they agree and disagree with are considered. In response to a series of structured questions, Harris voters were overwhelmingly for regulating their own conduct and merging of freshmen and upper class housing. Klein voters wanted a voluntary pass-fail system of grading outside one's major. Voters for both candidates strongly disagreed with the proposal of having students sit on the Board of Trustees.

In the open-ended replies the personality and approach of Dave Harris were the major considerations of most voters. Harris voters referred to the possibility Harris could "stir things up" and that he was a dynamic, honest and sincere individual. Sixty-three percent (40) of those who voted for him did not mention his ideas specifically and of the rest who did, over half (12) had reservations about his ideas. Another factor that his voters mentioned, though not as often as the above two, was that Bob Klein was rather "unimpressive," "too cooperative," and showed little forcefulness.

Klein voters reacted more to Harris than their own candidate. Only 50% of the female voters and 25% of the male voters had positive things to say about Bob Klein. They mostly stressed his clean-cut appearance, practical ideas and cooperative manner. Thirty-three percent (15) of the Klein voters said explicitly that they were voting against Dave Harris because his ideas were too far out and his approach was unrealistic. Others did not discuss Klein, but discussed Harris in a manner which seemed to suggest they were voting against Harris.

Discussion

In working with the data, the result which captured my attention was the overall dissatisfaction among all voters concerning the general attitude of the student body towards education. The tone of the educational setting seemed to be of crucial importance to them. Dave Harris' victory seems to be a manifestation of a student desire for a dynamic educational process. When students referred to stirring up things, their comments were slanted towards constructive effort in the form of a continuous dialogue with the administration and getting things moving. Harris conveyed an image that the students saw as dynamic and earnestly concerned with their situation in the educational process. Klein came across as slightly "phony" and not very capable of bringing about any changes. Also, most observers noted the increased student participation in this election campaign over others and the heated discussions occurring all over campus. In fact, on an optional question 17% (11) of the Harris voters mentioned that the election caused them to think about their educational goals. On another optional question concerning

Stanford's major problems, the only area of consensus was the need to upgrade the academic tone (spirit) of Stanford. These factors lead me to believe that even though there was considerable range in convictions whether Harris was the right man, there was a strong vote cast for a shift from a static to a more dynamic state at Stanford.

The data also seem to indicate that the students do not seem to know adequately how the university functions. Over half of the voters for both candidates are satisfied with the faculty attitude towards students and the education they are receiving from these faculty. Yet, the quality of the academic atmosphere lies within the hands of the faculty to a great extent. Nevitt Sanford has suggested that the students do not know how to criticize the faculty. Undergraduates may criticize professors as teachers, and yet the professors still retain a halo in the eyes of most students.

There are probably many other misconceptions which help preserve the present process, though in actuality the process may bear only slight resemblance to the ideals espoused by the university. In this election the students saw an opportunity to bring more life to their education. Perhaps the needs of students will become more apparent not only through studies of them, but also through the student's own ability to make his needs known. It would be interesting to know how many students close open doors with myths they have about the educational process, and their place in it. They may often be more attuned to being compliant with the system than to discerning their own needs.

Chapter XIV

REVIEW AND DISCUSSION OF THE LITERATURE ON PERSONALITY DEVELOPMENT DURING COLLEGE

Susan Singer, Ph.D.

Definition of Personality

Personality development refers to fundamental change in the person--change in the nature, organization, and functioning of dispositions that underlie and determine behavior. Personality development is thus a process of inner change; how such change is manifest in opinions, values, and behavior can be understood only through intensive study of individuals over a period of time.

Personality is conceptualized in various ways by different theorists. Freud saw personality as consisting of three major systems--id, ego, and superego--that interact to determine behavior (1936). For Jung, also, personality consisted of interacting systems, some of which are the ego, the personal unconscious, the collective unconscious, and the persona (Jung, 1939). Allport defined personality as "the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to the environment" (1937, p.2). Bronfenbrenner, integrating various theories of personality, defined it as "a system of relatively enduring dispositions to experience, discriminate or manipulate, actual or perceived aspects of the individual's environment (including himself)" (1951, p. 108).

Common to this sample of definitions is the notion that personality refers "not to behavior itself but to dispositions that underlie behavior," and that "the dispositions of personality constitute an organized totality, a more or less enduring structure that interacts with the environment" (Sanford, 1967). This idea, that personality refers to an organized, interacting system of underlying dispositions (e.g., goals and ways of realizing them, impulses and means of controlling them, ways of experiencing, thinking, and evaluating), all functioning in relation to one another, is critical for evaluating research on personality development in college students. It implies that such research should be directed to the whole person by means that allow us to observe the dispositions that underlie surface behavior. There is no substitute here for intensive longitudinal study of individual students. (Several interviews at least would be necessary.) The discovery of general relationships or patterns of development would then proceed from thorough knowledge of many individuals.

Investigators sometimes use incomplete or inadequate indices of personality development. For example, the attempt may be made to assess personality development by means of attitude and values surveys conducted at the beginning and end of the college career or by comparison of freshman and senior classes. A very thorough study of opinion and personality by Smith, Bruner and White (1956) reveals the limitations of this approach. These authors studied intensively the personalities and attitudes toward Russia of ten adult men. They did a complete clinical case study as well as a thorough investigation of each subject's attitudes and opinions and his reasons for holding them and concluded that "there is no rigid or one-to-one relationship between the opinions a person develops and the underlying needs or dynamics of his personality"; that "opinions serve several functions for their holder"; and finally that "it is only when we recognize the embeddedness of opinions in the functioning of the personality that we can begin to understand the significance of the opinion and the conditions of its change" (pp. 278-79). Thus, surveys of expressed opinions and values, by themselves, do not provide adequate data from which to infer the presense or absence of personality change.

In what follows past and present studies will be categorized under three headings in terms of their relevance to the question of personality development in college. Three types of studies will be distinguished.

Types of Studies

1. Longitudinal case studies of individual students: Here the progress of individual students is followed during their years in college. Periodic interviews may be supplemented by autobiographies, projective and structured tests, examination of the student's written work, reports by faculty, etc. The focus is on the individual and the data are interpreted in terms of what they reveal about his development. These case studies yield detailed information both about surface and depth characteristics of the person, but the collection and organization of such data is an enormous task, requiring theory by which to interpret it and techniques for presenting it objectively and effectively.

2. Studies of change in personality traits: Here personality development is assessed from changes in scores on personality tests designed to measure dispositions such as authoritarianism, impulse expression, masculinity-femininity, etc. The subject's response to a test item is taken to indicate something about the degree to which his personality is characterized by the trait being measured. The value of this research for understanding personality development depends largely on the validity of the test and on the degree to

which it reliably and sensitively reflects differential change (Bereiter, 1962). Changes in group means, or comparison of freshman and senior means, of course, tell us little about what has happened to individuals, and reasoning from group differences to individual development is tenuous.

3. Studies of change in opinions, attitudes and values: Here students fill out questionnaires designed to elicit their opinions, conviction and values. The subject's response to a question often is taken at face value and not thoroughly explored as to its meaning. But by assuming that opinions and values reflect personality, investigators then aim to demonstrate personality change in college students by showing that freshmen and upperclassmen differ in attitudes. The value of this approach depends on the degree to which attitudes and values reflect personality. We have already indicated the possible limitations of this approach by reference to the work of Smith, Bruner and White (1956).

These three categories overlap somewhat. The lines dividing them are sometimes hard to draw, and in large-scale projects several kinds of data may be collected. After a discussion of the theoretical literature in the pages that follow, the empirical studies will be reviewed in terms of the three categories just described.

Theory

For the most part psychologists and psychoanalysts concerned with personality development have focused on the early years, believing that the personality has pretty much assumed its final shape by late childhood. In all of the chapters on developmental psychology in the Annual Review of Psychology from 1950 to the present there is almost no discussion of development after adolescence. In fact, early childhood development often is discussed in terms of its effects on the final state of affairs at adolescence.

On the other hand, the transition from adolescence to adulthood, from being a child in one's family to being an individual in one's own right, is a significant period and some theorists have paid attention to the kinds of important personality changes that might occur at this time. Because college is the setting in which many young adults go through this transition, the study of experiences in college is particularly appropriate for the discovery of how developmental tasks are defined and handled.

The theory that is available to account for personality development in the college years is not yet very comprehensive and is often embroidered with lofty hopes and ideals. It might clarify thinking in this area if a distinction were clearly made between values, as expressed in aims and goals of development, and facts and theory concerning the nature, processes and conditions of change. Students may change in wonderful ways - become more liberal, humane, aware and discriminating - or they may not, and a theory of development should account for both possibilities. (Educators sometimes set up an ideal of development that is partially out of touch with the student's developmental reality and possibilities.)

Erikson (1963) tried to lay the foundations of a developmental theory by delineating eight stages in the development of the personality from birth through the end of life. His theory of development rests on two assumptions: (1) "that the human personality in principle develops according to steps pre-determined in the growing person's readiness to be driven toward, to be aware of and to interact with a widening social radius, and (2) that society, in principle, tends to be so constituted to meet and invite the succession of potentialities for interaction and to encourage the proper rate and proper sequence of their unfolding" (1963, p. 270). The person's developing needs and capacities, meeting the expectations and demands of his social environment, result in stages of psychosocial development, each characterized by a particular kind of developmental task requiring the resolution of a crisis or conflict between basic attitudes towards oneself and the world. The resolution of the conflict at each stage leaves its imprint on the personality, coloring later development. Thus, to understand what is happening at each stage we must look at what has gone before.

The basic polar characteristics of each of the eight stages are: trust versus mistrust (first year: oral stage); autonomy versus shame and doubt (second-third yeard: anal stage); initiative versus guilt (fourth-fifth year: phallic or oedipal stage); industry versus inferiority (sixth year to adolescence: latency period); identity versus role confusion (adolescence-young adult); intimacy versus isolation (young adult); generativity versus stagnation (adult); ego integration versus despair (later years). The college student, between adolescence and young adulthood, first faces the task of establishing his identity and then of moving toward a close, responsible and enduring relationship with another person. The energies, emotions and thoughts of the college-age person are likely to be mobilized around these crucial problems and experiences in college certainly will affect their resolution.

Sanford (1966) discusses the role of the college in stabilizing and strengthening ego identity, emphasizing the opportunities it affords for trying out various social and occupational roles before deciding finally on a vocation and way of life. The development of personal identity may be stunted if, for instance, the student adopts an occupational role prematurely, before he knows himself. Or his ego identity may become diffuse if he is not able eventually to make a choice and settle on a vocation.

White (1966) accounts for personality development within a basically psychoanalytic framework but finds this theory insufficient to describe natural growth that is characterized by continuous change throughout life, selective response to environmental influence, and action upon as well as reaction to one's environment. White discerns four trends in the natural growth of the personality: (1) stabilizing of ego identity so that the person increasingly knows and appreciates who he is, (2) freeing of personal relationships from the impact of past relationships so as to be better able to respond to people as they are, rather than on the basis of predetermined perceptions and expectations, (3) deepening of interest, reflected in the capacity to enjoy what one does for its sake, and (4) humanizing of values such that ideals and standards of conduct become more humane and relevant to one's own experience.

In a more cognitive realm, focusing on the development of the intellect, Heath (1964) states five "invariant developmental trends" and aims to show that more mature college men (as nominated by their peers) are more advanced with respect to these trends than less mature men. Heath's trends are: (1) Increased stability of organization - less likely to be shaken by new or disturbing experience. (2) Progessive integration of new information - being open to new experience and integrating it into the existing self-organization. (3) Increased allocentrism - greater capacity to perceive events objectively rather than autocentrically, in terms of one's own needs. (4) Increasing symbolic representation of experience - better able to symbolize and think about one's experience. (5) Increasing autonomy - being more independent and self-directed.

Nixon (1962, 1966) also emphasizes the cognitive in his discussion of growth and definition of maturity. He says that in order to be an independent individual, a person must have a clear and objective view of himself, a realistic and undistorted view of the world in which he lives, and a meaningful way of life in light of his understanding of himself and his circumstances. Nixon emphasizes that in the mature person such knowledge of oneself and the world is conscious and explicit. The "work of youth" (1962, XXIO), the preparation for maturity, lies in achieving such knowledge.

These statements of trends, or directions of growth, provide a helpful orientation to the study of development, but they do not specify the conditions in the person and the environment that promote or hinder growth. Sanford, in his chapter "The Developmental States of the Entering Freshman" (1962, pp. 253-282) deals more systematically with these questions. Extrapolating from psychoanalytic theory Sanford (1962) draws a theoretical picture of the variations in strength of the impulses (id) and controlling mechanism (ego and superego) through adolescence and adult life. He locates the college freshman at a point between adolescence and adulthood when there is a sharp increase in the ratio of ego to impulses. But the controlling mechanisms, strengthened in response to the pressure of impulses in adolescence, are rigid - not tempered by judgment and understanding of the situation. Thus, the typical freshman has an essentially authoritarian personality structure reflected in stereotyped conventional thinking, submissiveness to authority, harshness in judging people, and hostility to new and different ideas. Given a young person in this stage of development, in what ways might he change in college? Sanford suggests three interesting goals of development: (1) Freeing of impulses from rigid control so that he will be able to express a greater variety of needs in a larger number of ways. (2) Enlightenment of conscience so that he can fashion his values intelligently and apply them humanly and realistically. (3) Differentiation and integration of the ego so that the ego will have sway over wider areas of his life, enabling him to have a greater range of experience, think and do many things, and bring all his faculties to bear on a task.

Change occurs, according to this theory, in response to challenges that upset the person's present modes of functioning and require new responses. For growth to occur the person must be psychologically ready to perceive and respond to the challenge. Also the stimulus to change must not be so stressful that the person is overwhelmed by anxiety and resorts to rigid, defensive ways of thinking and acting. Thus, the process of development is one of challenge and response. To see how college influences personality development it is necessary to identify the kinds of challenges that the college experience provides and the ways in which the students react to them. In some detail Sanford describes how various aspects of college life (the curriculum, peer relationships, teachers) can serve as stimuli or hindrances to development in terms of the three goals previously described.

In contrast to general statements of trends and goals, Sanford's theory provides a basis for formulating hypotheses about the ways in which particular experiences in college might affect the development of individuals with specific personality characteristics. So far, however, research has not been guided enough by theory.

Research Using the Case Study Method

The case study method is characterized by its focus on the development of the individual subject (rather than on differences between groups with respect to particular traits). The subject may be studied by a variety of means - interviews, questionnaires, projective and structured tests - all of which are interpreted in terms of what they reveal about him. General statements about development then are based on patterns of relationships commonly found in individuals.

At Sarah Lawrence College, a small experimental women's college, a number of studies of personal and intellectual development have been carried out during the last 30 years. Sarah Lawrence College, in its educational philosophy, is dedicated to fostering the intellectual and personal development of the student according to her needs, capacities and goals. In contrast to more traditional colleges, each student pursues an individually tailored program of study; formal academic departments and majors are eliminated; most classes are seminars; grades are supplanted by written evaulations; and the student has a close and continuous relationship with a faculty advisor or don. The college attracts intellectually serious girls from comfortable, well-educated families.

During the 1940's a series of several volumes was published describing research on ways of learning and growing, relationships of personality to intellectual development, the role of the study of literature in personal growth, and the impact of courses in psychology on the students (Raushenbush, 1942; Raushenbush, ed., 1942; Munroe, 1942; Murphy and Ladd, 1944). These studies are very interesting, reflecting the authors' intense concern, acute observation, and careful thought about how students are affected and changed by their college experience. Many case studies are presented.

In a more recent and systematic project the 86 members of a single freshman class were studied intensively from their freshman year in 1948 through graduation in 1952 (Murphy and Raushenbush, 1960). The students' development was assessed by a variety of means: interviews with both the student and her don; teacher's evaluations of her work; students' descriptions of the highlight of their college life; an extensive senior questionnaire; and vocational, personality and projective tests. An interesting finding was that the students who as freshmen appeared to be the most emotionally and intellectually developed - the most independent, self-directed, and well organized - did not seem to go as far in their development as the more dependent and compliant freshman who were then somewhat attached to their families. The author's hypothesize that too early development might be achieved at too great an emotional cost, that premature resolutions are apt to be limited ones.

Another important finding concerns the relationship between vocational orientations and personal development. There were three groups with respect to vocational plans: (1) students committed to a definite career, (2) students who wanted to do some kind of rewarding work but did not have fixed career plans, and (3) students who envisaged only marriage and a family and did not plan to work. The girls in the second group (interested in work but not career-minded) generally made the best use of their college experience for personal development. The career girls were too narrowly focused and practical-minded, and the girls who were not interested in work seemed to avoid commitment to their studies; perhaps they tried to withdraw from facing the complex problem of how an educated woman is to live after college. These three groups were of equal ability but they differed in the kinds of pressures for career or marriage put upon them by their families.

Thus, it seems that the girls who developed most at Sarah Lawrence were still young and undecided when they came there. Girls who appeared to be more fully grown-up when they came to college did not seem to make as full a use of what college had to offer for further growth.

The Sarah Lawrence studies may be criticized for lack of scientific rigor. But they abound in perceptive observation and careful thought--qualitities often lacking in more "scientific" ventures. They stimulate thought, suggest hypotheses and are enlightening to read.

From 1952-1958, Sanford and others (Sanford, (ed.), 1956; Sanford, (ed.) 1962) conducted a study of personality development in college women at Vassar, a traditional liberal arts college for women. Freshman-senior differences on theoretically important personality variables such as authoritarianism, impulse expression, etc., were assessed (the findings will be discussed in the next section), and a random sample of 80 freshmen were interviewed throughout their college years. Although test differences gave a general picture of development on certain personality dimensions, the interviews provided a picture of how the students lived, the pressures they felt, the impact of their academic and social lives, their goals and hopes.

In his description of the passage through college Freedman (1956) emphasizes the importance of the student peer group in the life of the Vassar girl. The freshman's main concern was acceptance by her fellow students. The peer group offered emotional and social support, set values, and provided insulation from the adult world of parents and teachers. Freshmen were generally conventional, docile and contented girls, wanting to be accepted and willing to work hard, but not strongly committed to a career or intellectual values. During the sophomore and junior years, the students grew more secure in their social and academic life and remained strongly peer-oriented. In the senior year, however, change was evident. With graduation imminent, many students became anxious about the future, wondering who they were and what they wanted in life. They were, at once, more upset and more open to learning than at any previous time in college careers. Some attempted to resolve painful conflicts by hasty marriages.

Drawing on interview material Sanford (1962) presents a case study of two students, Pat and Penny, who both scored high on a scale measuring impulse expression, but who differed radically in the development of their impulses during college. Pat was an "impulse-ridden girl" - i.e., a person who for defensive and largely unconscious reasons was dominated by impulses in thought and behavior. She majored in drama, which provided an outlet for exuberance and self-expression, but she was not able to use her college experience to free her impulses from unconscious compulsion. Penny started college as a sedate and somewhat constricted girl, but through the influence of her studies, teachers, and new friends she became aware of her impulse life and was able to think about it, control it, and enjoy it. Thus, we see how two senior girls could both score high on a personality scale for different reasons, a good example of how the case study method can reveal what is going on behind the test.

In 1962 and 1963 Esther Raushenbush (1964) visited campuses around the country interviewing students who were serious about their studies and wanted to talk about them. She presents case studies of four students, describing their personal and intellectual development as revealed in interviews, term papers and essays. A unique and most valuable feature of these case studies is that they reveal the personal meaning of academic work to the student, showing how his ideas and feelings about himself and the world were influenced by his studies. For example, a Harvard student, who initially majored in mathematics because he was good at it, changed his direction because he was so deeply affected by courses, teachers, and readings in social sciences. He was not an outstanding student by conventional standards, but his case study reveals the involvement, intelligence, and independence with which he pursued his education. Another case study is that of a "model student," a young woman who maintained an outstanding academic record, but who lacked real engagement in her work. Gradually she became aware of the sterility of merely acquiring and memorizing knowledge and she became intensely concerned with the creative process and with finding meaning. By the end of her college years, her ways of learning and her educational values had greatly changed.

The clinical case study method has been employed in the literature on mental health of college students. Several books in this area are Wedge (1958), Blaine and McArthur (1961), and Whittington (1963). In 1962, Peck described a large scale study of the mental health of prospective teachers using interviews, observation, structured and projective tests.

A serious drawback of the case study method is the difficulty of organizing the data about a person so as to be able to compare individuals with each other or with themselves at different times. Wessman and Ricks (1966) have had to deal with this problem in their recent study of mood and personality in college students. The aim of the study was to learn about the nature of mood, or affective life, in relation to personality and self-concept. In addition to intensive clinical case studies, two interesting techniques were used. One was a self-descriptive Q-sort made up of items taken from students' descriptions of their friends. The items were ordered into scales reflecting successful and unsuccessful resolution of six of Erikson's psychosocial stages (trust versus mistrust, autonomy versus shame and doubt, etc.). The other method was a set of 16 personal feeling scales (elation-depression, tranquility-anxiety, etc.) on which students rated their feelings for 51 consecutive days. Then the P-correlation technique was used--for each person, the scales were intercorrelated over the 51 day period, and the individual correlation matrices were factor analyzed. The composition of the factors indicated which feelings varied together, and the number of factors was taken as an index of the affective complexity or degree to which the person's feelings varied together or separately in a differentiated manner.

The authors found that the self-reports of mood agreed highly with all other sources of clinical data. They found that all of their subjects experienced normal mood swings from elation to depression and that these were accompanied by shifts in self-concept. In elation the self-concept is close to one's ideals, in depression there is a marked discrepancy. Also, most subjects were generally happy, but individuals differ greatly in the variability of their moods. Intensive clinical studies of happy and unhappy, stable and variable subjects revealed how central the quality, organization, and temporal patterning of moods are to the personality.

Wessman and Ricks' study shows again that the methodological problems of objectively investigating the subjective experience and unique organization of individuals can be approached productively. Q-sort decks, based on a theory of development, can be used to obtain both self-description and observer's descriptions of a student as he progresses through college, and the keeping of a diary or other continuous recording of experiences and thoughts can yield very revealing data.

Studies of Change in Personality Dispositions

Personality dispositions, as was stated earlier, are central and relatively enduring traits that underlie a person's expressed opinions and behavior. A common way of investigating personality development in college students is to compare freshmen and upperclassmen on tests (usually self-report inventories) designed to measure such traits. Authoritarinism in its various forms is a trait often studied in college students, but impulse expression, social maturity, masculinity-femininity, social intraversion and other dimensions have also been used.

The most frequently corroborated finding regarding change in personality variables during college is that authoritarianism, dogmatism, and ethnocentrism decline (Webster, 1956, Brown and Bystryn, 1956, Plant, 1962, Lehman, 1964, Hassenger, 1966). However, Plant, 1962, found that people who applied to San Jose State did not attend college, students who attended for two years, and students who attended for four years all declined significantly on these variables, suggesting that a lessening of authoritarianism between 17 and 22 is a developmental phase, not necessarily due to college education. Trent,(1967) on the other hand, found in a national sample of college students and non-college peers that the two groups differed significantly at the end of four years, with the college students being 10-12 standard points higher in social maturity and non-authoritarianism.

As part of the Vassar research (Webster, 1956) freshmen and senior women were compared on several personality dimensions such as social maturity, impulse expression, authoritarisnism, masculinity-femininity and the scales of the Minnesota Multiphasic Personality Inventory (MMPI). Seniors scored higher than they had as freshmen on social maturity, impulse expression (readiness to express impulses or to seek gratification of them in thought and action), the feminine sensitivity components of the masculinity-femininity measures, and the clinical scales of the MMPI. Freshmen scored higher than seniors on authoritarianism and on the conventionality and passivity component of the masculinity-femininity scales. Comparison of groups retested during their sophomore, junior and senior years showed that the greatest changes occurred during the first year of college (Webster, Freedman and Heist, 1962). These data indicate that Vassar freshmen tended to be somewhat conventional, dogmatic and repressed and that their college experience made them more open-minded, aware and accepting of needs and feelings, and able to acknowledge problems and anxieties.

Also at Vassar, a developmental status scale was constructed from items that differentiated freshmen and senior students. The content of these items suggest that seniors compared to freshmen are more flexible, realistic, confident, tolerant, rebellious toward established authority, humane towards individuals, etc.

Several of the scales developed at Vassar have been incorporated into the Omnibus Personality Inventory (OPI), a personality inventory designed for use with college students (Berkeley, Center for the Study of Higher Education, 1962). At a number of colleges seniors have been found to score higher than freshmen on Social Maturity, Impulse Expression, and Developmental Status, although the initial freshman level varies with the institution (Heist and Webster, 1962).

Finnie, Scarr, and King (1963) studied dimensions of personality change in Harvard students. They tested and retested (freshman-senior) 57 students on a large battery of psychological tests and factor analyzed the different scores, finding eight factors. The major dimensions were interpreted as amount of change, rejection versus acceptance of people, group-related versus inner-related conventionality, traditional versus emergent values and impulsivity versus control, giving a general picture of the nature of personality change in college students.

Constantinople (1965) compared freshman, sophomore, junior and senior students on avowed levels of happiness and on levels of personality development as measured by the Wessman-Ricks Q-sort, where the self-descriptive items are ordered into scales assessing successful and unsuccessful resolution of Erikson's stages of development. She found that men students show a regular increase in both happiness and development from freshman to senior year, whereas women do not, a finding that she interprets in terms of a theory of identity development. As men proceed through college and choose a career their identities become more firmly established, and they feel more settled and content, whereas women face a choice between conflicting roles and are therefore unsettled and unhappy. However, these findings are based on cross-sectional data and should be confirmed in a longitudinal study. Also, the difference between the groups on self-rated level of happiness are small.

The method of studying personality development by means of differences between test scores obtained at different times involves problems. First, the theoretical importance of the personality variable being measured may not be sufficiently established. Second, the validity of the test, the degree to which it measures the trait being studied, may be questionable. Third, we do not know enough about the psychological processes involved in responding to test items, how endorsing or refuting an item is related to the trait in question and to other needs, pressures, and situational factors. Fourth, self-report personality measures are unstable. Bloom (1964) found that correlations between test scores obtained one or more years apart are lower than would be expected on the basis of plotting a theoretical course of development of personality traits, and unstable measures can hardly reflect change meaningfully. Fifth, there are other problems involved in the measurement of change by means of differences in test scores, such as unreliability of difference scores, regression toward the mean, unequal intervals at different points at the scale.

Bereiter discusses these vexing problems involved in assessing change and concludes that subjective ratings of change are better indices than pre-test post-test differences (Bereiter 1962, Bereiter, 1963). That is, a trained observer can recognize change when he sees it and can say that X has changed more than Y. Because of the errors inherent in test scores and test score differences, ratings based on such direct subjective assessments of change may be more reliable and accurate than difference scores on tests.

Even with good tests that meaningfully depict change in personality variables, we still lack normative data on non-college people of the same age with which to compare our findings. Finally, tests may miss important areas of a person's psychological situation, and development may occur in areas not captured by tests. To quote Allport: "Even the subtlest of nomothetic methods carries us only to the point where we see that the score on a certain variable is interdependent with scores on other variables. The personal nexus wherein all variables are joined eludes every nomothetic approach" (1960, p. 31).

The point of these remarks is to emphasize that test differences (or lack of them) do not tell a complete or necessarily meaningful story. Findings should be interpreted critically and with caution. One can feel more confident if other kinds of data corroborate the test findings.

A further research problem is that while personality test score differences may demonstrate change, they shed little light on the conditions producing change. Assuming that the particular demands and opportunities of the college environment are determinants of change, Stern (1962, 1963) and Pace (1962) have developed parallel inventories for assessing both the needs of the subjects and the press, or psychological demands of the college environment. The Activities Index (AI) has 30 need scales and the College Characteristics Index (CCI) has 30 corresponding press scales. The CCI mean scores of a student body give a picture of the impact of the college environment on the students, making it possible then to consider personality in the light of environment. Stern (1963) summarizes research findings, showing that different types of institutions differ in their dominant press: élite private liberal arts colleges exert a strong press for intellectuality and autonomy, denominational schools tend to exert a strong press for conformity and submission; and large state institutions have a fun and drink atmosphere, lacking academic direction.

Pace (1962) reports a study in which it was predicted that pressure to adapt to the press of the institution would result in corresponding personality changes in the students. For example, students in an institution emphasizing humanistic values would become more humanistic, while students in a highly competitive school would become more competitive, etc. Personality changes in the direction of the dominant press of the school (predicted by the CCI) occurred in liberal arts and engineering colleges but not in business colleges. Pace also deals with the question of whether the environment of the college is created entirely by the kinds of students who go there. If so, we would expect a high correlation between the scales of the AI (reflecting personal needs) and CCI (reflecting the press of the college), but the median correlation is .55 indicating that about 30% of the distinctive environment of the school (as perceived by the students) is accounted for by the distinctive characteristics of the students it admits.

In the same line Pervin (1966) has used the semantic differential technique to study student-college interaction. He had students describe themselves, the college, ideal college, faculty, and administration on scales such as authoritarian-democratic, religious-secular, funloving - hard working. He then related discrepancy scores between self and college, college and ideal college, a college and faculty, etc., to performance and satisfaction. He found, for example, that at one college dissatisfied students saw the college as more conservative, less equalitarian and less scholarly than did satisfied students. Pervin suggests that we may be able to find the optimum college-student fit to best foster personal development.

Assessing personality in relation to the environment in which it functions makes good sense. In 1956, Stern, Stein and Bloom made it quite clear that knowledge of personality traits alone is not sufficient for predicting success in a given situation; we must also know a good deal about the situation. Large assessment studies (as those of OSS and VA psychology trainees) failed in their predictions because of insufficient knowledge of the criterion to which they were predicting. The accuracy of predictions of academic success and our understanding of personality development in college students is enhanced by taking account of their perception of the demands and opportunities of the college environment. Talking to students - letting them tell us how they see their environment and how it affects them - might add considerably to the picture we have of the environment.

The sample just given of studies assessing personality development by means of tests was meant to illustrate major trends and point up problems of research in this area.

Studies of Change in Attitudes and Values

Much of the research on personality development in college students has focused on changes in attitudes and values. The results, or the interpretations of the results, have not been conclusive. Does change in expressed opinions and preferences reflect fundamental personality change? We really cannot tell unless we know a lot about the person (Smith, Bruner, and White, 1956). A senior student may subscribe to more liberal opinions in order to conform to a new social group or to his conception of the role of college graduate, with no fundamental personality change. Or he might develop a great deal in self-awareness but hold his former values with new meaning and understanding. Or opinion change may reflect genuine growth. Hence, the inconclusiveness of the results.

An early and extensive survey of students' attitudes was conducted at Syracuse University by Katz and Allport (1931). The topics covered included reasons for attending college, vocational choice, fraternities, snobbishness, cribbing, sex, and religious beliefs and practices. The book contains a discussion of techniques of attitude assessment and a review of the literature until that time.

Newcomb (1943) studied change in attitudes towards politics and public issues among Bennington College students (women) and found that many of them, especially the student leaders, changed from conservative to liberal, away from the views of their families and closer to the views of the faculty. Since students at Williams and Skidmore (also liberal arts colleges) retained their initial conservatism, Newcomb attributes the change in the Bennington girls to their unique college environment. In a later study (1963) Newcomb found that the liberal attitudes of many of his subjects persisted into later life and that they tended to select husbands supportive of their attitudes. He suggests that either regression or persistence of attitudes, after leaving college, are related to the selection of one's social environment and are facilitated by the supportiveness of husbands.

Jacob (1957) surveyed the findings of a large number of studies in order to determine whether general education in the social sciences affected students' values - i.e., standards for decision making, behavior and judgment. He aimed to find out the nature of contemporary students' values and how they were influenced by the content of instruction, particular qualities of the instructors, teaching methods, and the climate of the institution. Jacob also wanted to ascertain whether the pre-existing personality of the student made him more or less susceptible to influence in certain areas. Jacob concluded that college students are contented, self-centered, politically conservative, tolerant, and homogeneous. With the exception of a few "particularly potent" institutions, colleges really do not change students in a fundamental way:

> "In conclusion, college has a socializing rather than a liberalizing impact on values. It softens an individual's extremist view and persuades him to reconsider aberrant values. It increases the tolerance potential of students toward different beliefs, social groups, and standards of conduct so that they can move about with minimum friction in a heterogeneous culture. It strengthens responsibility for the prevailing social order" (p. 53).

College graduates may appear to be more liberal, but "the liberalism detected in the studies was not a liberalization of character but a random collection of opinions in vogue in a particular generation" (p. 52).

Jacob's report illustrates the difficulty of trying to assess fundamental change in people by means of attitudes and values questionnaires, the instruments used in most of the studies he surveyed. Where no change was found, Jacob concluded that college had no effect; where change was found he concluded that it was not genuine, only superficial. The problem probably lies in the inadequacy of the instruments; for it is most difficult to draw meaningful conclusions about fundamental change from opinion questionnaires and attitude surveys.

In 1959, Barton wrote an excellent critique of Jacob's book clarifying problems involved in evaluating changes in values. Barton raises the question of "What effects do we want to study?" Although Jacob's purpose was to determine whether college affected values (standards of decision making), Barton points out that the studies surveyed by Jacob actually dealt with several kinds of effects: changes in intellectual ability and critical thinking, increasing factual knowledge, greater emotional sensitivity, and changes in values.

Many of Jacob's negative conclusions about the effects of college apply not to changes in values, but to the independence of mind with which values are held. Jacob "devalues" change that seems to occur through social adaptation rather than through independent thought. Jacob also distinguishes between basic and superficial values, claiming that college does not affect basic values. But Barton points out that what is considered basic or superficial is often determined by the biases of the investigator.

Along with discussing Jacob's book, Barton systematically analyzes the problem of evaluating the effects of college education. First, we must be clear about what effects we want to study, then appropriate measures and research designs can be devised. Barton critically discusses commonly employed measures and strategies, pointing out their relevance for the question at hand. This kind of critical analysis is rare in this field and very valuable.

The following studies were done since 1960, after the publication of the Jacob and Barton books. McConnell (1962) reported a survey of students' attitudes toward civil liberties. He finds that the more tolerant students tend to be interested in ideas, theoretically-oriented, complex, flexible, and potentially creative, and that such students tend to be clustered in certain schools of liberal reputation. Also, seniors generally are more permissive than freshmen and there is more change towards tolerance in some schools than in others.

Scott (1965) studied personal values, conceptions of ideal personal traits and relationships, in University of Colorado students, focusing particularly on fraternities and sororities. Twelve values were assessed by asking the student to indicate the degree to which he liked or disliked certain modes of behavior: intellectualism, kindness, social skills, loyalty, academic achievement, physical development, status, honesty, religiousness, self-control, creativity and independence.

Concerning value change, Scott found that for the entire student body test-retest correlations one year apart were lower than would be predicted from the unreliability of the scales and concluded that values do change. In explaining these changes, Scott focused on the ways that fraternities and sororities influence values. He found that a freshman's initial values were important determinants of whether or not he pledged a Greek organization. (Pledges showed an emphasis on interpersonal, organization-maintaining values.) He found further that over a one-year period pledges changed in different directions from non-pledges. Pledge men placed less value on academic achievement, loyalty and religiousness, and pledge women placed more value on intellectualism, independence and creativity. The only significant change among non-pledges was a decline in independence value for women.

Huntley (1965) investigated changes in the Allport-Vernon Study of Values scores of 1800 men at Union College. He broke the total group into nine divisions according to major at the time of graduation: humanities, social science, science, premedical (science), premedical (arts), chemists, physicists, and engineering. He found that the groups differed in values at time of entrance and had about the same pattern of differences at graduation. He also found that for each group, defined by major, significant changes occurred. But, if the groups were mixed the changes were obliterated. (For the entire population the theoretical, political and social values show no change, but there was significant change on these values within subgroups.)

Hassenger (1966) studied Catholic college impact on religious orientation in a women's college. The study was sophisticated theoretically and complex in method. He predicted that the college would have a differential effect on religious attitudes depending on social background, educational objectives and personality traits, and existing views of the relationships between God and man. He found that on the whole college had meager influence on the students' religious lives. The students most affected by their college experience were the resident students from working class backgrounds, who had the greatest exposure to college influence and in whose eyes the college had more prestige.

Conclusion

Reviewing literature on personality development in college students is a somewhat frustrating assignment for three reasons: (1) Much research is conducted with little theoretical explicitness about the nature of personality change and the conditions of development. (2) There is often not enough careful and critical thought about what is being measured, as Barton shows in his critique of studies of the effects of college education. There is not enough attention to the appropriateness of methods and interpretations of findings, so that important results can be distinguished from trivial ones. (3) There is not enough imagination as to methods. Investigators seem fixed on paper and pencil objective tests and questionnaires - easy to collect and score, but fraught with problems of interpretation and yield little insight into the meaning of the college experience to students. Students are available and articulate. Why not have them more often talk and write, describing their experiences in interviews, discussion groups, autobiographies, essays, etc.? The Sarah Lawrence studies using such methods were very illuminating.

There is a continuing need to improve and develop objective and quantifiable methods for describing individuals, so that the organization and uniqueness of the personality is preserved in the description, but which allow at the same time for the person to be compared with others and with himself at different times. The Q-sort (Block, 1961) and other kinds of rating scales point the way. We need to bridge the gap more fully between studies utilizing personality scales and questionnaires, which depict personality in a limited, albeit, reliable way, and case studies, which depict personality fully, but are likely to be highly selected and subjective.

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Chapter XV

RECOMMENDATIONS FOR POLICY AND PHILOSOPHY

Joseph Katz, Ph.D.

We approached our study with the intent of looking at as many of the student's experiences during his four college years as our methods and time would allow us. We did so from the expectation that the lives and the development of the students might be richer and more complex than are allowed for in the common articulations. We have not been disappointed in this expectation, and our own views of the college situation underwent considerable modification and enlargement.

We have been particularly impressed with the great variety of people who are called students - and this at institutions that are as homogeneous as the two we have been studying. As our work progressed, we came to feel we were backsliding when we used the expression the college student. Seeing the wide variety of styles, purposes, and personalities that college students exhibit, we began to wonder also whether current institutional procedures and arrangements do not force them too much into the same mold.

What Are Colleges For?

We might, therefore, begin this chapter with a radical question and ask whether, if we were allowed to start from scratch, we would really design for most people between 17 and 22 the kind of collegiate institutions that we now have. We know that other societies and our own society at other times have provided quite different arrangements for people at this age. In some societies, people of college age have been married for several years and integrated into the work world of their culture. In other societies, or particular social classes within them, they have spent these years wandering, or in military service, or in small groups with other apprentices bound to a master imparting his skills and point of view. These arrangements are often eminently satisfactory to strivings that characterize the college age years: desire for movement, thirst for experience, looking for meaningful relationships with adults and peers. Contrast them with the vast impersonality of our peer cities called campuses.

What social functions do colleges serve in our culture? (1) One of the most obvious is that of general education.[1] There are other functions as well. Colleges provide (2) an avenue for social mobility. They contribute (3) to socialization, from training in manners to the development of greater social and political tolerance. They provide (4) a place for boys and girls to meet and prepare for marriage. They give (5) some preparation for the work world beyond school and are indispensable stepping stones for many occupations. Different types of colleges have tried to adapt themselves to the wide variety of class, cast, region, taste and sophistication in American life. The more sophisticated and prestigious institutions have thus (6) served as selecting devices, by which people from the "lower" strata could be drawn into the business or intellectual middle classes and élites. Because much of pre-college education is paid for out of public funds, colleges (7) provide parents with the opportunity of a personal outlay or even sacrifice for the sake of their children's education. Colleges (8) enable society to keep the young "off the streets" at a particularly explosive and restless period in their lives, to keep them sitting still and relatively safe in their more or less large classrooms and dormitories--effecting immediate restraint and also giving good training in the compulsive art on which so much of social stability seems to depend. Four years of schooling (9) keep a large section of the population out of the labor market--possibly of help in an economy in which it may be as important that some people not work as it is that others do.

Obstacles to Education for Individual Development

The functions just listed are all socially useful, more or less. They do not include the possible role of the college of furthering individual development. This role, taken seriously, introduces a new element and a new challenge - one that has not been central in spite of the familiar rhetoric according to which the development of character is one of the goals of a college education. It has been the primary focus of our study.

We need to go beyond surface meanings. Definitions of the goals of education that list the development of character, or the production of gentlemen, or "well-rounded" individuals are often, in spite of their individualist cast, definitions of desired socialization, aiming at the production of reliable and predictable people for business and social purposes. (Such socialization may or may not interfere with individual development.) Moreover, throughout history, schools and teachers have served not just to educate people, but also to control them. Literature abounds in accounts of the pedantic discipline and even sadism of many a schoolmaster, whether he be the ancient Greek slave in Rome, or the teacher in the Jewish Chader, or the "Pauker" in the German Gymnasium. The rod and the teacher are readily associated with each other. The focus on social science and social welfare in this century has been one factor that has brought attention to human development more within the realm of possibility. This was prepared throughout the 19th century when the problems and rights of groups previously discriminated against--deviants, insane, minorities, women, children--came to be thoroughly explored in literature and science.

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[1] But here when one considers the college curriculum--in intent a distillation of the accumulated wisdom and intellectual skills and competencies of our civilization--the question arises to what extent it is premature for people of college age, as the curriculum has been not only the slow acquisition of mankind but requires, in order to be mastered by the individual, prolonged experience, testing, autonomy, and maturation.

But in many ways, attention to individual development is a "luxury" even today. Thus, (1) many people are more concerned with the task of getting increasingly large numbers of our young into college than with the task of increasing the quality of their lives. There are other environmental demands that compete or even conflict with the purposes of individual development. Among these are (2) demands for fitting in with the current technological, bureaucratic and political ways; (3) parental expectations which can be met by high performance, or by the "right" occupational choice, or by association with the proper peers. There is (4) the anticipatory influence of the graduate and professional schools which, perhaps more by habit than by design, exercise great control over the students' undergraduate course selection, the development of his interests and his grade-getting activities. There are (5) the often unspoken demands of the peers stemming from the needs of human groups for solidarity, agreement and leveling of deviant behavior and attitudes for the sake of increasing predictability, group cohesion, and the reduction of envy due to the outstandingness or divergence of individuals. There are (6) the demands of the faculty whose own education, experience and loyalties make them strongly inclined to serve the interests of their specific department or even their specialty of method or content within it. Some of the professors tend to identify departmental interest with the educational interests of students--usually not by having thought long about it or by having acquainted themselves in detail with human development during the college years. Other faculty more or less explicitly do not think that the development of students, as distinguished from the development of subject matter, is their task.[2]

In response to the fact that the academic sector provides for part of education only, there have sprung up other arrangements and institutions to complement and to oppose it. This is the "extra-curricular" sector with its fraternities, clubs, activities, and mores. (Our study has shown us its continued vitality.) In recent years this "extracurricular" sector has been particularly expanded in the areas of society-oriented activities, such as work with underprivileged, political and civil rights activities, summer and vacation work camps, peace corps type activities in this country and abroad. Extracurricular activities have traditionally been thought of as auxiliary, but in operation they have been of primary significance for many students. They furnish precedents for a more deliberately inclusive approach to education.

Differences Among Students

All relevant educational planning must begin with the recognition that students are greatly differentiated from each other not only in ability and interests but also very much in their purposes, learning styles, backgrounds, and personalities. Some students during college question their identity, others feel relatively comfortable in an identity already achieved, still others anxiously cling to a hard though brittle shell of identity that protects from threatening external stimuli. Some students view college as a deliberate stepping-stone to a career while others are there simply because it is part of the many assignments that life will make. Some students have intellectual curiosity, others have conceptual ability of an almost "athletic" sort that they exercise without much intellectual involvement. Some like to collect information the way other people collect money or stamps. For many the cognitive-analytic dimension takes second place in comparison with others. They prefer to experience life aesthetically, or kinetically, as in sports. Others feel they are doing something real when they serve or manage or manipulate people. Some like to be left alone to brood and to phantasy. Others like to experience life in concert with other people, through working on a common task, friendship or conviviality.

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[2] The fact that professors are increasingly given the role of caretakers of the young between 17 and 22 is perhaps an accident. Other societies might and did choose other people to be in a guiding or controlling position during these years. It so happened that professors with their institutions were already there as the years of formal education extended for more people.

Colleges have not sufficiently linked these varied styles and approaches[3] to their educational tasks. Some students respond to verbal and mathematical concepts directly. But for others their full significance becomes clear only when mediated through other activities. Imagine a group of students working with deprived children, learning the difficult skills of working constructively with other people, understanding their actions and motives, knowing when to support, challenge, or inhibit, when to take initiative and when not. Such experience would lend itself well to theoretical purposes. It would verify for the students what they read in the literature about human development. The unsolved problems in their work experience would drive them to seek help from the experience of other people as embodied in past discussions and research.[4]

Even such an apparently simple arrangement as the one just described might make for far-reaching changes. There is, for instance, the question of timing: When and how are theories to be introduced? At what point in their exposure can students (and different students differently) best see the relevance of a theory to the data on hand? At what point does premature exposure to theory inhibit the development of their own articulations? Further, how much time is required to study a problem and integrate what one has learned? Many students might be able to do a project as the one described well only if they can spend all or a major part of their time on it during a semester or a year. Many may be able to do it well only if they can do it via work and discussions with others rather than by themselves alone. These are questions to be settled by experience. But the raising of them shows up the arbitrariness of our current ways of presenting subject matter and the regimenting of students' time into four or five nearly equal "cognitive" strips.

Lecture - vs. Discussion-Oriented Students

Another difference between students consists in their varying preferences for lectures and discussions. Lectures seem particularly convenient for those students who do not care too much about the contents of what is offered or, whether they care or not, wish to have their material in a readily repeatable form at examination time. Though it is not a neat division, lecture-vs. discussion-orientedness probably goes together with varying degrees of an active vs. passive orientation to learning. The latter is indeed the underlying grouping we are looking for: a continuum from those students who approach subject matter with their own questions and desires to those who repeat what is said because they think they have to.

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[3] See also the later discussion in this chapter of major areas of teaching.

[4] Our illustration is taken from the area of social service. There are many other types of projects that can be devised in other areas. For instance, the understanding of literature or one's capacity for expression and writing may be much enhanced by sending students into the community observing and recording the speech and expressions of people in different situations and different walks of life.

For a start then, one might offer students the option of having the same subject matter treated in two types of courses, lecture and discussion. One can expect that students by their choice of the one or the other option will sort themselves out naturally and will allow us to develop different teaching techniques. It would never do to force a lecture-minded student into a discussion because he only gradually can leave an externally imposed structure and move towards one that comes more from within. It would also never do to have an opinionated discussion-minded student[5] submit himself to lectures. He will simply continue his dogmatism or rebelliousness in silence. But gradually students can be made aware of the limitations of their initial mode of preference. This would call for the identification of teachers who have special talents for reaching different kinds of students.

In the suggestion just made a further underlying principle is implied. The problem is how to select students for differing learning groups. One way of course would be to sort them out by way of tests and questionnaires. But there is often an alternative. By letting students sort themselves out in terms of their own preferences--if these are indices of underlying dispositions--one can obtain a grouping that is less externally imposed. It has the advantage of leaving the choice to the students and bypasses the implied passivity in grouping by tests or questionnaires.

Differences in Personality

People with different personalities learn quite differently. The authoritarian student is relatively closed to evidence in areas which clash with his prejudices, fears and unacceptable desires. He will not easily open himself up to evidence in social science or to the more tender values in literature unless his own fear of these alien and invading matters can be mitigated.

The highly impulsive student will not sit down long enough to consider views that seem to threaten inhibitions of his propelling "needs" and he will often not have patience to have regard for the inherent complexity of people or of things. His academic as well as his personal education depend on his strengthening his capacity to control his impulses and his learning that to do so is pleasant rather than tyrannical.

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[5] Some students seem to prefer discussion not so much to listen to others as to hear themselves.

The obsessive student will continue to transform facts and feelings into concepts and he will think the one a substitute for the other and his concepts, because of their divorce from reality, will be barren, overgeneralized and upon scrutiny reveal infantile preoccupations. While seemingly in love with words, he will have a secret contempt for thought because on his deeper levels he is aware of the defensive use he is making of it or of the insufficient connection of his concepts with his feelings.

There are other students who tend to feel comfortable and "themselves" only when they can "relax," forget about the requirements of the classroom and engage themselves on the level of narcissistic display of clothes, of semi-drunken loss of consciousness, of infantile power play, or sentimental dependency. Where there is such ready tendency to regression, the ego capacities acquired in the classroom tend to remain underdeveloped because they are cut off from the person's vitality. (There are, of course, other types of temporary "regressions" which can be in the service of ego expansion.)

How are we to have regard for personality without turning colleges into therapeutic institutions? This question is particularly vexing because therapeutic institutions are not brilliant models of effectiveness and because psychotherapy is available to relatively small numbers. Teachers usually do not have the competence or the interest to serve as "therapists" and they could not easily become so without an improper mixing of two different roles. The answer lies in providing the environmental conditions and experiences that are in the interest of psychological development. For instance, any experiences, academic or otherwise, that further a student's sense of competence[6] are going to enhance his self-esteem and affect his readiness for genuine self-awareness and self-criticism as well as his resistance to improper external pressures. Provisions for and proper timing of confrontation with heterodox ideas, or of living arrangements, or of leaves from the college, or of work experience, differently for different groups of students, can have important psychological effects. For instance, the authoritarian student probably is best not confronted during his freshman year with a roommate who is likely to have some of the characteristics that he objects to in people. Such confrontation may have to be reserved until later, after he has accepted smaller differences in ideas and people. The impulsive student will need to be provided with tasks at once congenial to his impulses but at the same time requiring some disciplined self-control and tolerance of frustration; and he may best learn this by working together with peers who share some of his openness and unconventionality while at the same time being more disciplined. The obsessive student needs both structure and gradually increasing opportunities for more spontaneous expression. It will help if we can join him with people who will not only respond to his words but also to his underlying feelings and who are not trapped by the hostile component of his obsessiveness.

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[6] The next section will provide illustration.

A New Structuring of the Educational Career in College

What might the educational career of the college student look like? The starting point is to make the student the "unit of education," not the course, the interest of the professor, the department, the graduate or professional school. This requires that we begin college with a different profile of the student than the number of courses and units he completed in high school. Instead, the profile would list strong proficiencies of the student, such as artistic training, skills in languages, extended knowledge of an academic field, special skills as a community leader, or as a worker with children. This list would be followed by an indication of relevant areas that the student is weak in. For instance, a student very capable in debating or other rhetorical skills might show underdevelopment of his aesthetic capacities. A student very gifted in the writing of poetry might be rather deficient in the capacity for detached and objective research and interpretation of evidence. A four-year plan for each student would be to strengthen him further in selected areas in which he is already strong and in which his interests persist, as well as to achieve a considerable strengthening in at least one area in which he is initially weak.

This profile is not to be drawn up in terms of present departmental divisions of subject matter but in terms of differently defined areas of human competence. After the initial profile has been drawn - and it is to be revised at appropriate intervals - it is of great importance that the learning of students be "sequential," resulting in a cumulative growth of competence. The goals ought not to be defined as so and so many courses passed and so and so many units acquired, but rather as achievement in relatively well-defined areas of skills or competence. Thus, one such area may be constituted by rather complete mastery of a foreign language, that is, speaking and writing it and good acquaintance with the literature and culture of its people. At the present time--though the requirements of having a major in principle calls for it--there is too little opportunity for students to carry academic pursuits to some sort of closure. The fulfillment of a requirement gets the student often just to the beginning of a subject matter, leaving him with one more bit of disconnected "knowledge."

If the focus is on selected areas of learning in which some mastery is possible, one may expect the sense of competence, of doing something complicated well, to generalize to other parts of the student's personality and increase his self-esteem and inner and outer identity. This may be particularly so because the proposed plan calls for considerable expansion of the student's competence in an area in which he is initially weak but which is of special importance for his over-all development, e.g., a somewhat exclusively machine-oriented engineer developing competence in the area of social relations or of aesthetic sensitivity. Moreover, learning sequentially and achieving closure may develop psychological habits that go against the fragmentation of energies which is characteristic of many people in our society and is strongly supported by our academic arrangements.

Curricular planning dominated by the principles of sequentialness and closure are to take the place of the present more or less mechanical shuffling of requirements, requisites, co-requisites, and pre-requisites. We also ought always to be mindful that four years is a very small amount of time and that our present curriculum may try to do "too much too soon" (and may often include the wrong subject matter). In psychotherapy where our methods are more adjusted to human capacity than in education, the sense of the slowness of time is widely shared by practitioners. Many attempts thus far to shorten the time required for more thorough-going therapeutic changes have not been too successful.

Establishing and maintaining the student's profile might seem to require a heavier outlay than now of personnel, particularly at the time of the student's entrance to college. But there might be even a eventual financial saving because it will allow the student to be very much more self-directed than he is under present conditions.

The question will be raised of what happens under the proposed system to "core" or "distribution" requirements, the implication being that the student needs to be exposed to some of our basic scientific and cultural achievements. One way to handle this would be to present these various intellectual areas in something like the traditional "courses," that is, series of lectures might present in each semester some of the basic concepts of a particular field of inquiry. These might be pure lecture courses, but no grades and examinations would be given and attendance would be voluntary. One can easily imagine that a group of teachers, particularly gifted for this kind of lecturing, will emerge and they will have to appeal to students without the benefit of grades and other external incentives. There might be several different people giving lecture series in the same area to take account of the fact that different students are attracted to different personalities and different approaches to the same subject matter.[7] Adequate course descriptions and the "grape vine" would take care of channeling students to the right professors. These "courses" should be open to students in any of the four college years so that again he can determine himself at what time he is most ready for an exposure to any particular field. Discussion sections might be provided for those who wish to have them.

Such exposure ought to be more carefully distinguished from the acquisition of the sustained competencies that have been suggested. These competencies, as indicated, would be in many different areas, the language, literature and culture of a people, interpersonal skills, such as teaching or working with children, journalistic observation and writing, and otherwise cutting across or redefining existing divisions within academic disciplines. This will require a broadening of the kind of faculty we now have (which will be discussed more fully). The student on his part gradually takes more and more initiative and responsibility for his own learning so that actually one of the outcomes of attending college will be a much higher capacity than now of self-direction and of utilizing authoritative resource people rather than being told what to do by them or by the structure of the curriculum.

But we must watch out not to abandon one relatively coercive system for another, however well-meaning and appropriate it might appear. Self-determination by the student ought to be a cardinal principle from the beginning. But what about those students, of which our research has found large numbers, who rely upon guidance, structuring, and being told what to do? They, too, should be allowed to choose for themselves but be given the opportunity of being confronted with the consequences of their choice, so that they increasingly learn that even passivity has consequences - many of them not wished for and many of them alterable. (Thus to choose only a modest example one might let entering freshmen determine whether they wanted letter or pass-fail or no grades at all.) It would not do at first not to let students with a more passive conception of learning indulge this bent because it would deprive them of the support they need and they will try to reestablish it by subterfuge. It is only by a gradual weaning process that they themselves can discover their own submerged interests and the pleasure that comes from choosing for themselves--a task that calls for particularly gifted teachers.

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[7] There is, of course, always the possibility of a "Mickey Mouse" lecturer--who are plentiful under the present system. The fact that no grades are given eliminates one incentive to prefer such a lecturer. Appropriate assessment of teaching and its effects--to be discussed later--would further reduce this possibility.

Our present curricular structure includes many requirements particularly in the first two years of college (to which the standard student response often is that these "are to be gotten out of the way"). Such requirements are often justified by reference to the "immaturity" of freshmen. But their "immaturity" may be assisted by a system that restricts their choices. I would urge expansion of the choices that freshmen and other students are allowed to make, but build into the system retrospective discussions with the students of the mistakes they feel they have made. We are in general too anxious to protect our students from mistakes and neglect both the benefits of initiative and the opportunities for learning that mistakes provide.

Finally, when we speak of the student as the primary "unit of education," we do not mean students separated from each other, as they now tend to be. Students not only would like to remove some of the barriers that now exist between them and others, but they also can learn many things much more effectively in joint projects with others (for which illustrations will be given later). In college society, we have tended to assign peer-relatedness to the social realm and individualism (everyone is graded separately and tends to work separately) to the intellectual realm. Perhaps some reversal is in order.

We have made several innovative proposals already and are going to make more. We stop, therefore, to suggest that when one thinks of putting any innovative idea into practice, one should often not expect or perhaps even desire that one's institution adopt it wholesale. It would not only have little chance of "political" acceptance by the faculty, it would be premature to apply to many people so many untested arrangements. Perhaps one of the reasons for the relative stagnation in higher education has been the unwitting principle that reform ought to be college-wide. A more feasible alternative is to have new procedures tried out on the minimum number of students necessary. This will allow greater latitude of experiment, bypass "political" objections, and pave the way for eventual easier adoption of procedures that have proven themselves by example. The Board of Educational Development, proposed by the Muscatine Committee at Berkeley, is a step in that direction in that it allows for experiments to be authorized for a period up to five years outside of the established jurisdictions of the faculty and faculty committees.

Expansion of the Faculty

Our approach to undergraduate education deviates from the interests and experiences of perhaps a majority of current college faculty. In the populations studied by us, there has been relatively little contact between students and faculty but when it occurred and particularly when the interaction was based on a coincidence of the professor's and the student's interests, its influence has been profound. Thus, even for purely academic objectives it would be desirable to have more interaction because of the need of adolescents for a part-model, for encouragement from an adult, and for something of the master-apprentice relationship. But we need to broaden our concept of faculty further if we wish to serve the interest of the student. We need faculty who can educate students in areas other than the present ones and who can also address themselves to other developmental needs of the student. Obviously this does not mean that all faculty need to fill this role, but that this be a function filled by some faculty. We do in fact now have personnel other than the academic faculty, such as student deans, counselors and resident advisers. But these people tend to be assigned the functions of administration, housekeeping, and policing. They are regarded as ancillary and are not seen primarily as educators. Education is thought to be in the hands of the academic faculty, who view education primarily as presentation of subject matter.

It will strengthen our conception of the need for the expansion of the kind of faculty we have if we outline some major areas of teaching or learning.

(1) There is the academic-conceptual area under which is comprehended much of the traditional subject matter, descriptions, theories, hypotheses, etc.

(2) The next area is the aesthetic-artistic one, the area of feelings, emotions, intuitions, sensitivity, sensibility, etc. Some philosophers have described it in cognitive terms and have spoken of the "language" of the emotions, the "language" of music, etc., but the very paradox of the metaphor indicates that we are dealing here with a different interaction between the external world and inner experiences. This approach to reality requires its own sequence of training, its own standards of performance which, though sometimes subject to a wider range of argument than standards in the more exact sciences, can obtain some degree of consensus among qualified people. This mode of learning needs more recognition in the colleges and it needs more practitioners among the faculty. (The recent tendency towards resident artists and writers is a beginning.)

(3) There is the area of people-oriented activity. This area is in some sense akin to the aesthetic one as it also strongly involves the affective and feeling modes of response. For some people, working with others, understanding them, being of help to them, is a favorite mode of dealing with reality. The psychiatrist is a professional instance of this kind of orientation; his practice requires a certain amount of theory and cognitive apparatus, but in

addition, his own feelings, perceptions, hunches, in some sense his whole personality, are as much an instrument as the merely cognitive. When we think of teaching this kind of a "skill"[8] we must bear in mind that its practitioners often are not as verbally facile as the ordinary academician. In this they resemble the artist whose teaching consists less in long lectures than in examples, in long looking or listening, and the right words, sometimes quite few words, at the right time. These people like to teach in the face of some actual experience that the student is involved in. As faculty they are probably best used, not by performing verbally before a class, but by working together with students in life situations. (Such faculty may also serve by being available to student groups to submit problems in the affective domain of their own lives to a more searching and competent analysis.)

(4) A second group of people-oriented activities, e.g., salesmanship, politics, administration, must be considered separately. Here we are dealing with a quite different manner of understanding people and being of service. It is an often tricky area because interests other than that of the person served are of major importance to the person rendering the service. Moreover, unlike the person in the helping professions, he has no central obligation to inquire into the motives of the people he serves and it is often considered legitimate or even desirable to satisfy their irrational wants. There are many students strongly oriented towards the political or administrative life. They might be taught in the manner of some of the ancient sophists to master the arts of manipulation and exploitation. But to teach them the art of satisfying divergent interests without injury to one or several of the parties will require some pioneering efforts. Some writers have deplored the lack of a tradition in this country, as contrasted with England, of motivating and training people for public service. The area of business service, too, seems to deserve more attention.

(5) The fifth area is that of inanimate, man-made objects, instruments, machines, computers, etc. Some people find reality most manageable by creating artificial replicas or artificial extensions of it. As we know, they have been so successful that they have been able to crowd out much of the natural world that we inherited and have changed the ecology from one of natural surroundings to man-made ones. Here we need two sorts of faculty: (a) those who are particularly adept with students who have a primary orientation towards man-made objects and who need to have it brought into connection with other human activities and (b) those who are able to impart some of the pleasures and skills of these pursuits to those whose primary orientation it is not.

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[8] In the context of the college this means faculty who can help students to understand healthy as well as unhealthy human and social functioning.

(6) The sixth area is that of motoric expression. In some respects it is well taken care of. There is the large athletic apparatus; coaches are important people, many students engage in sports as participants and as spectators. But the attitude to motoric expression often is ambivalent, compounded by fears of its commercialism, its competition with academic pursuits and - perhaps also - some influence from a general European puritanic heritage that assigns the body, in ideology at least, a rather low place. But given the fact that there is a large number of students whose favorite mode of relating to reality is via motoric expression, the problem of connecting their motoric responses with other parts of their personality deserve much further attention.

(7) Finally, we come to the art of sociability. Though it tends to be regarded as incidental, it actually occupies a major place in the informal learning that takes place during college--spanning the range from learning manners to developing capacity for friendships and intimacy. Given the fact that the informal learning brings only moderately satisfactory results, more attention to the factors that foster good human relations seems desirable.

One could add to or modify this list of seven areas. But the essential point is to move beyond a "single variable" conception of teaching. Present faculties tend to represent only one segment of humanity, primarily people with strong cognitive orientations[9] and the tendency to exercise thought in a "non-applied" fashion. The students represent a very much larger variety of interests and orientations, and relatively few of them will go into careers similar to those of college teachers. Yet, at the very time of their exposure to their specialized faculty, students are segregated from much of the adult world, so that at a period in life when they are particularly open to change, having just left home and its long-established set of influences and expectations, they are secluded from potentially significant adults.

We need a considerable enlargement of the kind of people that we bring our students in contact with. This may be done by enlisting faculty from non-academic occupations. Explorers, archeologists, journalists, businessmen, government officials might be asked to become associated for a period of time with the college. These might be people drawn from any part of the country or the world.[10]

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[9] The implied criticism is not of "cognition" which is a universal human function and merits strengthening in anyone, but of a particular mode of cognition, the academic-conceptual one, being fostered in neglect of the six other areas we have distinguished.

[10] They might obtain teaching leaves from their employers - who might be well served by the fresh perspective their employees would gain from such an exposure both in their work and personal lives.

But, further, there are available in almost any community a large group of adults, some of whom could serve as "auxiliary" faculty. These would be people who have a particularly exemplary knowledge of their own occupational field and are able to communicate it, or people who have an outstanding knowledge of an area outside of their occupation such as the psychiatrist who is also an expert on painting or the lawyer who is an authority on Galileo. These people often have a great desire to teach and to be in contact with young people. They would benefit the students not only through their intellectual knowledge and skills but also through what they stand for as people. What better model could there be for some college students heading into business than to be exposed to a businessman who at the same time is learned and aesthetically alive. We would give special care to matching the right student with the right man.

The auxiliary faculty would help solve a qualitative and a quantitative problem. Qualitatively it would present students with a larger variety of "models" than the academic faculty can provide. Quantitatively it would enlarge the number of available teaching adults; there can never be enough people on the present faculty if increased faculty-students contacts is the goal. It is likely and perhaps desirable that most of the auxiliary faculty would serve only a limited number of years.

Strengthening the Freshman Year

We have already stressed the importance of the proper phasing of learning. Our study has impressed us with the importance of the freshman year, particularly in its early parts. There are many sudden challenges and threats to the entering student: separation from home, sudden exposure to large groups of strangers who may seem threatening or superior, new academic demands. Colleges traditionally have given some attention to the freshman year. For instance, they often assign students to live with roommates of somewhat different backgrounds, so that their range of acquaintances and sympathies be broadened. Or they provide special introductory courses that aim to awaken and strengthen the students' interests in new subjects or new approaches to them.

But the outcome is often not quite what the planners intended. The exposure to an "exciting" introductory course may be hampered by the student's lack of capacity or interest to respond to the style of teaching and be aggravated by his failure to live up to his previous grade performance. The contact with the "different" peers can be more painful and alienating than broadening. Thus, both the new academic testing and the exposure to strangers not necessarily perceived as friendly re-intensifies earlier adolescent anxieties about one's identity, including one's capacity, and re-activates an identity crisis. The resolution of the crisis is too often in a non-developmental direction: accommodation to the academic system by "psyching it out" and accommodation to the challenge of difference by withdrawing as soon as possible to peers who are like-minded in dormitory, fraternity, and friendship groups, and the establishment of a peer culture that keeps the values of the faculty at a distance.

It seems very desirable that colleges direct their best resources and people to the freshman year. A combination of self-determination and guidance ought to get the freshmen into the appropriate learning environments. Those freshmen who feel ready to assume independence, even if it seems a brash independence, ought to be given it, with the expectation that they will confront themselves and will be confronted with the consequences of mistaken choices and that, as we have already suggested, mistakes will be made an occasion for learning rather than of censure or punishment. Those freshmen who expect to be told what to do, graded, and directed ought to be given this opportunity with the intent of confronting them with the consequences of passivity.

Part of the present problem with the freshman year is that the student is faced with academic values that are out of keeping with his status as an adolescent. The university is dedicated to careful, sometimes rather tidily limited, search for evidence and carefully defined conceptualization. The adolescent is much less a theoretical person than he is an ideological one. He likes to work with great ideas, comprehensive in scope, and his ideas are closely related to his own emotions, confusions and gropings. He uses ideas both as a guide out of his confusion and as a way to savor ideationally what he cannot yet experience emotionally, sensually, or in relations with other people. Football player and poet alike are given to discussing the grand topics of religion and of sex in their freshman bull sessions.

For a start we would propose that in the freshman year this ideological bent be given full chance of expression. This may go against the grain of the academic orientation. The professor is aghast at the inaccuracies, grandiosities, vaguenesses, confusions and emotionalities of the student's ideational production. He wishes to clamp down almost immediately and give the student a sense of what cool, detached, accurate scientific investigation is like, whether in history, literary criticism, or in physics. The student can conform if he must, because his previous training has already taught him what the coin of the realm is. But it is not what he likes to do and he gets the sense that his own ideational products are unworthy. He feels humiliated and inept, and hence, finds it difficult to connect academic reasoning, and perhaps thought in general, with himself. So to some extent, the colleges themselves produce the "anti-intellectuals" they complain about.

If we encourage the student's own gropings, we can rely on his wanting sooner or later to refine his concepts and test some of his ideas, either by established methods of inquiry or by the new ones he might find himself. We should gratefully accept curiosity where we find it, should respond as close to the level of the student as we can, and assume that he will not be able to jump several steps at once. This implies that we have no preconceived plan as to where such development will lead. We will need to learn to listen better and follow the student's bent of thinking and his thinking devices. This will require a rather drastic revision of our standards. Instead of being guided by graduate school standards of performance, as is the norm now, we would have to develop new standards appropriate to the student's developmental situation in college, try to discern his purposes and work with him towards its more adequate realization. If a student prefers philosophy to art we will need to work with him so that he and we understand and, if desirable, modify his avoidance of art. We must be alert to the ways in which he links ideas to current or anticipated actions or to his past, e.g., to parents, siblings, events, because we cannot expect to clarify non-ideational entanglements by attention to subject matter alone. We will need to determine where to rely on his own tendencies for growth if left unhindered and where to step in with confrontation, perhaps even restraint.

We must enlarge the opportunities for the freshman to act independently. We constantly underestimate the intelligence and autonomy of people of all ages. We are misguided in part because in front of teachers, students often put on a mask of submissiveness and wanting to be told; it seems safer to do so, and the "mask" also shifts responsibility onto the teachers. The freshman year should end in some feeling of success, competence, something new learned, some new capacity for enjoyment acquired. When there is little sense of success, the student and we should seek to understand the causes of the failure so that he does not feel overwhelmed or driven into a corner but sees the beginnings of a more promising path. (Hence, colleges have a special obligation to their drop-outs and might consider offices of exit to parallel those of admission.)

The possible question whether our proposals would lead to a lowering of standards should have answered itself. For we have implicitly introduced the principle of the relevance of standards and with relevant standards it is possible to be "tough" and educative. The "profiles" recommended by us will see to it that the standards remain relevant to the individual. Having incentives come more from within will, we expect, also help to bypass much of the age-old emphasis on forcing students to study. Force and learning are largely contradictory; they produce temporary conformity at examination time and insufficient internalization. We assume that particularly people of college age, with their curiosity not yet overly stifled and with overburdening demands of reality not yet upon them, will naturally work rather hard if impulse and work can be brought into some sort of harmony. Educators have relied too much on the superego and too little on the impulse and imagination as helps in education.

There is a certain degree of functionlessness in the present college. Much of what it now does for the sake of preparing students for their occupations, professions, or graduate schools could well be left for later. In fact, graduate or professional schools often repeat some of the student's undergraduate work, thus adding to the students' dissatisfaction. Given the lack of professional function, a certain free space exists which could well be used for paying much more attention to the possible expansion of the student's personality.

We are proposing a college with less walls separating it from the community and of a different structure within, a different conception of the faculty, a more complex conception of the students. Thus, we see students as participating in many more of the activities of the community, spending more time away from their parent institutions (facilities of exchange between different colleges might be developed), studying abroad, working abroad in Peace Corps type activities during the college years. We see them taking responsibility earlier, being more self-determining, more in positions where they can take charge, being of more use to other people. We see all this as focusing on their developing some explicit areas of competence and achieving an integration of learning and personality development.

Facilitating More Meaningful Peer Relations

Our discussion thus far has moved in the orbit of the traditional academic concerns of the college, though with considerable broadening of basic concepts. We will turn next to the student's relations to other people and, after that, to his personality development.

At the start of considering peer relationships among students, it needs some reminding how "artificial" the living arrangements for students are and how unlike anything that characterizes their lives either before or after college. The American model of a living unit is the one-family house, preferably with acreage around it, and with a separate room for each child. There are thus several rings of "protection" and distance from other people. In college residences, students are thrown into huge building complexes, often with their own rooms rather small and barrack-like and inhabited in uneasy proximity by one or more other people. A student who wants to express more of himself through furniture or decorations is often severely restricted. "Functional" and cramped desks and beds are frequent and the rules proclaim that there is to be no painting, perhaps not even a thumb tack on the wall. This kind of communal living is thoroughly "un-American," outside of course of the army.

The students are isolated from people other than those of their own age and sex; there are no adults, no children, not even pets. This situation is actually very much like what Plato recommended when he proposed that in order to have people become fit for his own state and be freed from the conditioning of a previous corrupt society, the young be segregated from their parents for a period of years and be raised in isolation outside of the city. These conditions would lend themselves nicely for "brain-washing." But nobody is interested in obtaining that kind of control. So the net effect is more one of omission. Students live together in great proximity without reaping a commensurate benefit in socializing and the development of deeper relations.

At the same time, many students long for more privacy and they find themselves insufficiently able to cope with the intrusions and the noises of so many strangers. Sometimes a restrictive and narrow-minded director or other supervisor adds to their annoyance. In spite of all this, students until recently have been good boys and girls. Griping and an occasional raid on the kitchen or a food fight seemed to satisfy their need of protest. But in the last two years some of them have begun to raise more fundamental questions about the relations of housing to their intellectual and social lives. In thinking about college housing, we all should be reminded that the trend of building large complexes has considerably diminished outside of college. Many hospitals and schools are no longer the forbidding huge armories we are used to from the turn of the century. Colleges have been continuing to build large structures. The pressure of increasing enrollments has, of course, been a factor. But we will need to give much more attention not just to housing students, but to how their living arrangements can further both sociability and privacy.

We have noted in an earlier chapter that students in their passage through college acquire greater ease and skill in their daily interactions with other people, but we also found that many of them still have a sense of incompleteness as far as deeper involvements are concerned. Even joining a fraternity which assures an immediate group of close associates, in no way assures personal closeness. Some do feel quite "alone" even in the midst of their "brothers." The emphasis of the college on judging people by their own individual performance contributes to this sense of isolation. But there are at least three other conditions: (1) lack of opportunity for groups to work for a common purpose through mutually complementary activities and (2) doing work useful to other people. Other people, either as associates or as objects of concern, do not enter sufficiently the work world of the student. In addition, students (3) do not receive sufficient support, including "feedback" at the right time in the right way, from older people. Young people need a sense of support from and acceptance by the older generation. The messages they get are too thin (the grade), often irrelevant to their deeper purposes, and often "humiliating" as they stress how they do not measure up.

It would seem very desirable to make possible the formation of many student groups which are united in a common task. This task could be anything: a project in the history of the opera, current styles in jazz, a study of the lives of a minority group, teaching children in the elementary grades, etc. The important thing is to find a useful and a real task and one that can be accomplished only by a group acting in concert. It is easy to anticipate the effects: live discussions, new ideas, great pleasure in the work, people getting to know each other much more thoroughly. In our study there was a somewhat isolated fraternity member whose greatest pleasure during his four years of college seems to have been occasioned by his building a boat together with some other fraternity members in the basement of their house. This was a shared experience and shared meaningful purpose. My proposal simply systematizes and enlarges this happy experience.

The new dimensions of interaction that the proposed groups will experience will also give rise to new thoughts, new feelings, and new conflicts in the members. These can, under the guidance of a competent adult, become occasions for fresh learning not just about the work tasks but also about the group process or about oneself.

Getting such working groups together, which we assume to be composed of males and females, has also the advantage of providing a superior alternative, and complement, to the dating system. The obvious difficulty about the dating system is that it is not well suited for people to get to know each other sufficiently in the daily and more characteristic aspects of their personality and in their truer competencies and attitudes. By providing opportunities for more revealing association, we can help our young people to mate less under the dominance of the id and more that of the ego, to have their choices dependent less upon their part inhibited and part frustrated impulses and the resultant phantasies, and more upon clearer knowledge of each other and the experience of mutual accommodation on a common task.

The people to whom the student can be useful may be outside of the college walls, but they also can be within. We should make it much more possible for students to be useful to each other. This might, for instance, be done by enlisting students for teaching other students. (This has been tried occasionally in different places and, as far as I have been able to determine, usually with great success.) Such teaching not only is one of the best devices of having the student-teachers learn subject matter, but also would enhance their self-esteem and sense of purpose. (These students would be under the supervision of a professor who himself would learn much about the teaching process through their experience. Using students as teachers may also be one device for individualizing instruction.)

We suggested earlier that mixing students of different personalities and backgrounds during their freshman year can be premature because freshmen have to struggle with so many new challenges that a student different from them may be more a threat than an invitation to development and cause them to withdraw into associations with those who are very much like themselves. Attention to housing arrangements ought to be, therefore, a concern throughout the four years. Getting people together will have to come about not through assignment but through attractiveness, as in the work groups we have suggested. One of the college's task may be defined as helping to prevent premature confinements to one group alone.

As is clear from the comparison of Berkeley and Stanford residence patterns, when official restraints are removed, residential choice is different from what some college authorities want. For instance, many people, male and female, stream into off-campus housing. Probably, residential choice, at least beyond the freshman year, ought to be left to the student himself as one exercise of his individuality. The work and other task groups would serve to bring students together and thus balance the centrifugal pull of separate residences. At the present time the classroom is the primary common meeting place but, as we have observed them, association and acquaintance, even of a superficial sort, seem rarely facilitated by it.

The balance of coercion, structuring, and freedom is a most delicate one. For instance, in the course of a study we undertook of a large introductory course, one of the instructors conceived the idea that it would be a good thing for students to have meetings with their instructors in their dormitories and to have men and women from the same corridors assigned to the same section to have classroom discussion easily joined with dormitory conversation. This arrangement was put into effect but we were told later that many students resented it because they regarded it as an invasion of the academic into their own private precinct. This reaction is in part a reflection of the present distance of the student culture from the academic culture. But safeguarding the students their own territory will always be an important principle of educational planning.

Different Ways of Impulse Control

Looking at students in the perspective of their personality development has pervaded this whole chapter. We do not think that furthering personal growth would simply be a "nice" addition to present programs. We think it is essential if the four years in college are to be meaningful to most students and we also think there cannot be intellectual development if intellect is considered in isolation from the rest of the person.

A psychological grouping of students at this point must be highly tentative in theory and experimental in practice. In our research we have found it useful to work with the concepts of impulse and of impulse control (distinguishing in particular superego and ego controls). One of our underlying assumptions has been that growth occurs when the person can express his impulses more freely, when appropriate, in thought and in action and can have his impulses become more sophisticated and complex. This implies a transformation of the infantile components of his impulses, but not their being anxiously shut off or their occasionally being expressed explosively or by other non-integrated "relief" mechanisms. Growth also consists of the power to recognize irrational impulse demands, particularly regressive and destructive ones, and the ego strength to say "No" to them.

In our study we found a smaller group of students than we had expected who had achieved, by the time of graduation, an integration of impulse and ego that pervaded their whole personality. We found more people who, in a part of their personality, had achieved some satisfactory integration. An initial openness to one's own deeper feelings is a helpful predisposition. So is a willingness to expose oneself to new and different experiences. These new experiences may be found in association with people who have different feelings, attitudes, and histories from oneself; or in doing some innovative work on one's own initiative, whether it be work with underprivileged children or striking out on a painting style of one's own; or in attaching oneself to an intellectually and humanly gifted professor, particularly if the student can develop increasing autonomy from his model. Those students who were able to recognize their bondage to some external expectation or to a false self-image fared well in freeing themselves towards expressing a deeper purpose and interest of their own that had hitherto lain dormant.

We also found much "pathology" in the development of students. There is a large percentage of students who have personality handicaps that will make their future lives difficult both for themselves and the people they will live and work with. To begin with a familiar, though in its severer forms not very numerous type in the populations studied by us, the authoritarians. These are the students who project onto the external world some of their own unacceptable impulses and who then seek to fight their own impulses via attacking other people. As citizens (and alumni), these people will be a social nuisance and troublemakers out of proportion to their numbers. It would be a service if these people could be made more accessible to education while in college.

We found another group of students who at first seemed much like the authoritarians in tending to be rigid in their attitudes and to look for external rules. But on further inspection, they turned out quite different in some respects. These benevolent authoritarians did not tend to view people who are unlike them in some salient feature of impulse expression as evil and as targets of hostile aggression. They accepted restrictions of their impulses quite submissively but with little signs of rebelliousness. (Perhaps early in life they were encouraged to play it safe without conflicting stimulations to submission and defiance.) This is par excellence the group of passive people who will let life happen to them. They will socially be regarded as quite useful because of their docility and decency. (But the educational task seems to be to wake them up and lead them beyond their reliance on external stimulations to find more stimulation within themselves.)

While these two groups tended towards rigid impulse control or overcontrol, we found others who were characterized by undercontrol. These are people whom we called drifters, people for whom the social expectations and forms and their own past personal constraints are no longer adequate. They have broken away from these but they have not found the means within themselves for integration, not necessarily achieved integration, but at least are on the way. This group is distinguished from a more disciplined group which is able to conform to outer and inner demands but does so at the expense of internal conflict. We found that some of them make little progress towards abatement of their conflicts during the college years and carry the consequences of their lack of resolution into their occupational and marital choices.

Need for Attention to Occupational and Marital Choice

As colleges cannot focus on all aspects of a student's development, they ought to identify areas in which attention is particularly strategic. Through our research we have been especially impressed with the need of giving more attention to the student's occupational and marital choices. Turning to occupation first, we see the occupational choice process hampered in many ways. The student has to make decisions relating to his future occupation while he actually has very little concrete knowledge of it. Hence, his anticipations may be more in the realm of phantasy or hearsay. His choice is hemmed in by expectations of society, peers, and parents. Society has its prestige rankings, the peer group have their expectations based on a mixture of admiration, competition, and attempted control, and parents have their desires, often based on the unconscious wish to have their children compensate for what they think of as losses or failures in themselves. (We found that this parental influence is sometimes made the more devious because of the lip service expressed in saying to the student that he is free to choose whatever he wants to.) As happens when there are so many demands, the student makes no firm decision, but somewhat half-heartedly moves along, doing the required things when their time comes, e.g., declaring a major, choosing a graduate or professional school. All the while he has more or less strong mental reservations and does not really feel committed. In a sense he never makes a choice, but the many little steps he thought relatively non-committal add up to making the choice for him.

To some extent there is nowadays less need for commitment because there are strong external pressures to keep him in school anyway, and beyond school, some careers have great flexibility. An engineer might become an administrator, salesman, or a scientist. A physician may become a laboratory specialist who hardly ever sees people, an administrator, an all-purpose doctor (internist) or a psychiatrist.

There are many cross-purposes. Some parents and students see college primarily as vocational preparation. At the other end the tendency of the occupational market seems to make such preparation increasingly less necessary or even desirable. There is the student's own need to do something useful and remunerative, hampered for many by the emphasis on liberal arts for their own sake. There is the student committed to a specific vocational program who keeps himself from realizing that a seemingly idle interest stimulated by a course in a different subject really betokens that he may be heading in the wrong direction intellectually or personally.

We would suggest that as a start towards resolving these dilemmas that students be more fully introduced into the world of work while still in college (these jobs should be real and the work should be "hard"); that after such exposure appropriate procedures be devised to enable students to become more aware of their interest and to free themselves from preconceptions of what they "ought to do" or of what they are "good for."

In regard to the marital decision, greater exposure to the reality of human relationships would help to make it a more appropriate one. The intimacy of association in the student work groups we have suggested would allow for much more profound knowledge of each other. This in turn would give rise to questions, and sometimes problems, for which group discussions and other awareness-producing procedures could seek answers. As everybody knows, there is an enormous amount of preconceptions and anxieties that clutter marital selection, yet we have not taken enough responsibility at this crucial developmental stage to help people be more intelligent in this regard.

The special situation of the women students in regard to the marital decision is particularly illustrative of the problem we are talking about. In the freshmen women studied by us we have noted a great desire to be able to complete their four years at college and, hence, a tendency to break up any relationship with a man that threatens this goal. By the time they are seniors and have gone further along the path of developing their capacities, they often find themselves with the prospect of job and domestic activities far different from those that have characterized their long history of schooling. There is not only a sharp turn in their intellectual or academic path, but also in the expression of their autonomy.[11] (By contrast a man is often considered just at the start of a career of developing his skills and finding self-expression.) No adequate institutional or social pathways exist for large numbers of college women to graduate into lives in which their initiative and curiosity can find commensurate expression. We are here at a frontier because nobody really has a good answer and too little has been tried. The following proposal is designed to increase our knowledge and to begin remedying the situation.

We have indicated that even the freshman women are at least implicitly aware of the problem of a possible threat to their intellectual and other autonomy. Making use of what we earlier referred to as the ideological propensity of freshmen, we would propose that (experimental groups of) freshmen women be brought together - a course if you wish - for discussions of femininity, female roles, male-female relations, etc. We expect these discussions to be often more ideological than scientific. Their purpose would be to bring into the open the students' ideas in their complexity and emotional force and to encourage them to think about the problems and to gain confidence in their own thinking.[12]

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[11] Though we found many women more or less explicitly aware of this situation, it also was our impressions that romantic expectations and the social pressures towards marriage contributed to a lack of realism about this next stage in their lives.

[12] Similar programs ought to be devised for men. Also at the appropriate times during the college years men and women students ought to discuss their questions jointly.

In the second year we would encourage the students to do various kinds of library and empirical investigations. Thus they might collect data about the status of women historically in different periods and different regions, their economic positions, their social positions, or they might conduct actual surveys within the surrounding population. From the third year on we would expect these students to put their minds more and more to ideas that would lead to change. For instance, they might think of ways in which the occupational world could take account in work arrangements of the differences in the life cycle of women, or of ways in which the cultivation of skills and interests can be carried on into marriage.

We are once more combining intellectual and other developmental purposes. Our women students are going to learn a lot about different fields, such as economics or sociology or psychology and they are going to have a chance to have their knowledge be of use to society. At the same time, participation in such a program will have also profound personal effects upon them. It will give them a confidence in themselves that will make it less tempting for them to view themselves primarily as marital, status, or as sex objects.

Use and Abuse of Psychology

There is deep resistance to think of human development as important. At the beginning of psychotherapy it occurs often that a patient will protest that his problem really is not big, does not deserve all that attention. The therapist may point out that this is a way of saying that the patient himself, not the problem, does not deserve attention. As a culture we have not well enough accepted the proposition that people deserve attention. We oscillate from creed and acts asserting the dignity of the individual to permissive self-indulgence or to depersonalized organization in business and schools.

There are hazards in tying psychological understanding to educational problems. To begin with, the "language" of the emotions is by no means easy to decipher and subject to misinterpretation even by qualified observers. It would be very regrettable if in paying more attention to the affective domain we allowed a hardening of the concepts, such as has taken place in the cognitive domain with its IQ's, SAT's, GPA's which force people into ill-fitting abstractions. Even the present chaos would be preferable because the peer culture and individual resistance allow for escape into some affective freedom. We are also only too familiar with the intrusive meddlings of the would-be helper (who often seeks domination) or the well-meaning but platitudinous efforts of others who are concerned with the "extracurricular."

For this reason it has, at times, been stressed in this chapter that psychological knowledge may be particularly usefully applied in changing institutional procedures rather than making everyone conscious of the depth and range of personality. Colleges certainly should make periodic examinations of how their procedures serve to facilitate or inhibit the development of their students. Such investigations, conducted at some length, ought to include qualified outsiders whose interests and thought patterns are not identified with the established ways of the college.

We have hesitations about institutionalized research, for in the past it seems rarely to have risen beyond the conventional assumptions of their colleges. Perhaps new departures are possible. The institutional researcher need not and perhaps should not have power, so that he can neither be a threat nor do favors; but he ought to be a person who can initiate experiment by persuasion. We will conclude this chapter by a brief report of an experiment conducted by us as part of our study.

An Experiment with Teachers

We approached the staff of a large introductory humanities course for permission to study teacher-student interactions in the individually taught sections of the course. We obtained permission, we felt, more because the teachers of the course thought we ought to have a chance than from enthusiasm for our project. Part of our plan was to give a questionnaire to the students enrolled in the course and in preparation we asked the staff to tell us about their objectives in their course. To our amazement we found what we had thought would be a brief staff session turn into many hours of discussions. It seemed almost the first time that the staff had raised this fundamental question and the instructors turned out not only to be interested but also to have quite different answers. Some stressed scholarly training as the primary objective, others historical interpretation, others moral reorientation. This reaction proved to be prophetic of a continuing involvement.

Our work in the classroom encompassed both observation and consultation. We observed one class per instructor each week and immediately afterwards subjected the hour to detailed analysis. Part of our work in the beginning turned out to concentrate on alleviating the instructor's anxiety about being observed. Gradually more of the instructor's energies became free for looking at students' reactions and his own behavior. Thus, one instructor soon began to conduct his own independent investigations of how the students responded. He did so via informal class discussion by giving a questionnaire, by letting students take over some of his classes while he sat in the back and observed.

It turned out we had met an unspoken need. Underneath the anxiety about teaching there was a desire to make teaching a more deliberate art, to obtain reliable information of what one was doing and how it could be improved. It was also discovered that such inquiry could be as intellectually challenging as the pursuit of one's subject matter. It became clear that planning of the syllabus or grouping of the students was in need of continuing investigation.

We offer this example to suggest that academic structures may not be as tight as they seem and this may be so because present procedures are not really very satisfactory to anyone. Hence, anyone who can show a way out will sooner or later be welcome. Finally, though we have stressed the satisfactions and development of students, a successful college needs to give its faculty, too, full scope for finding what is meaningful and pleasant to them and provide opportunity for their growth.

Summary

Undergraduate education at this point serves many different purposes. It is a further step in the socialization process; it provides channels for upward mobility; it provides some occupational preparation; it gives professors a place to pursue their specialized investigations and to obtain some recruits for them. Alongside of serving these purposes, it also creates a learning environment in which for many students at many times coercion predominates over curiosity and initiative.

The basic orientation of the chapter has been to show how the purposes of individual development may be more fully served by the college. It was suggested that at the start of college, a detailed individual profile of the student be drawn in order to determine his major strengths and weaknesses - defined differently from current curricular divisions. One of the aims of the college years would be not only to strengthen the student in areas in which he already has competence, but also to strengthen him in one or several areas in which he is weak but the development of which is important for his functioning as a human being. The focus of instruction would not be on the passing of more or less disconnected "courses" but on the achievement of competence and closure in as many or as few subject areas as the student is capable of.

It was suggested that the range of faculty be broadened to include a larger variety of adult models for this crucial developmental phase of transition to adulthood. Methods also are available to enable present faculty to take greater interest in and to equip them to develop better than now the intellectual and other capacities of their students. Special attention needs to be given to the freshman year and it is suggested how the opportunities for learning to be independent may be considerably expanded during that year.

Even residential colleges fall short of providing sufficient opportunities for students to implement their desire for more meaningful association with their peers. It was proposed that the constitution of working groups oriented to a common learning task would serve academic and other developmental purposes simultaneously.

The college years are crucial for the selection of an occupation and of a mate. It was suggested that many more of the college's learning resources be oriented towards enabling the student to make these decisions in a more intelligent way. The special situation of women students was discussed and a plan proposed for the college year that might help women students to safeguard the intellectual and personal autonomy they have developed in college and before.

There needs to be a fuller recognition of the variety of learning styles and personalities among students. Besides the cognitive learning (and teaching) style, there are the artistic, people-oriented, managerial, machine-oriented, and other styles. Students' personalities may be authoritarian, obsessive, impulsive, or passive and their paths of development may be characterized by varying degrees of defensive rigidities, by varying degrees of conflictedness or drift, and by varying degrees of integrative development. It was suggested that these differences of styles and personalities can often be served by "environmental" rather than "therapeutic" arrangements. Moreover, instead of having students sorted from above into categories, however well-conceived, it was proposed that by encouraging self-selection and choice among more meaningful alternatives than now exist, students will often place themselves into groups appropriate to their learning style, personality and developmental phase, and that this will at the same time give them a further opportunity to learn to exercise choice and benefit from the later assessment of its consequences.

ANALYTIC TABLE OF CONTENTS

Preface iv

Introduction 1

OVERVIEW OF CHANGES DURING THE COLLEGE YEARS

I. A Portrait of Two Classes: The Undergraduate Students at Berkeley and Stanford from Entrance to Exit 7

The Senior Year Questionnaire--Change, Continuity and Development in Personality--Students' Perceptions of Changes--Students' Perceptions of Determinants of Change--Changes the Students Wished For--Career Plans--Attitudes to Courses and Teachers--Attitudes to the University Administration--Favorite Student Activities--Residence Patterns--Summer Activities--Stanford Overseas--Relations with Peers--Sex--Qualifications of Future Spouse--Parents and Home--Change in Values--Postscript: Excerpt from a Case Transcript

Appendix: The Senior Questionnaire 81

Academic Life--Choice of Career--Extracurricular Activities--Relationships with Peers and Friendships--Sexual Development--Anticipation of Marriage and Spouse--Relationships with Parents--Perception of Self, Change and Development

II. Personality Scale Changes From the Freshman to the Senior Year 122

Brief Description of the Scales--Representativeness of the Sample--A Perspective on Mean Score Changes--Variability and Mean Score Changes--Cluster Analysis of the SM and IE Scales--Change in Item Frequencies--Summary

TWO INDIVIDUAL CASE STUDIES

III. Case Study: The Forces of Development and Constraint in the Boy's Situation 156

The Initial Plan: Chemical Engineering--Three Years of Struggle With the Plan to Major in Chemical Engineering

The Forces of Constraint--Background Shock--Identity Shock--Vocational Orientation Toward College Education--The Puritan Child Self--Crystallization of the Plan to Become a Chemical Engineer--The College Curriculum as a Source of Constraint on the Exploratory Drive--The Organization of the Work World as a Constraint on Exploration

Liberating Forces--Liberating Forces Within the Student--Bob's Inner Resistance to Constraint--Resistance to Becoming a Total Grind--Resistance to Constraining Entanglement with Girls--Bob's Drive to Explore the Curriculum--Social Drives--Liberating Forces in the College Environment--Student Diversity as a Liberating Influence--An Example of the Influence of Student Diversity--Deep Friendships as a Developmental Influence--Summer Developmental Influences--Organizational Roles as Developmental Influences--The Faculty Influence

The Break-Out--Changed Attitude Toward Drinking--Changed Attitude Toward Sexual Relations Before Marriage--Changed Attitudes Toward Grades--Changed Identity Situation in the Junior Year--Changed Reaction to Authority--Changed Major and Career Objectives in the Junior Year--Changed Interest in Liberal Arts Courses--Test Score Changes--Senior Year Dissolution--The Overall Senior-Year Picture--The Senior-Year Goal of Unconditional Freedom

IV. Case Study: The Girl's Situation: A House Divided 212

The Entering Freshman Picture--Career--College Major--Boys, Dating and Going Steady--Pam's Relationship to Her Parents

The Forces of Change--Going Steady--The Eroding Forces--Capitulation--The Interaction Between Going Steady, Career and Education--An Attempt at Synthesis--Dissolution

IV. (Continued)

Senior Year Outcomes--Career--Marriage and Family--Change in Aspiration Level--Graduate School Plans--Educational Effects--Looking Back.

Theoretical and Educational Implications--The Child Self in Personality Development--The Child Self in Education--Educational and Developmental Timetables--Is College the Best Place to Achieve Development Changes--Crises and Depression--Transference Relationships in College--Educating Women for Leadership--Identification, Identity and Non-Being--The Problem of the Small-Town Success in the Large, Cosmopolitan, Highly Selective University

RESPONSES TO THE ACADEMIC CURRICULUM

V. Student Differences in the Response to the Curriculum - The Open, The Straight, and The Narrow 253

Individual Differences in Student Needs--Method--Results--Discussion

VI. The Incomplete Liberalizing Impact of Higher Education: Case Studies of Two Pre-Medical Students 279

Professional Preparation and Personal Meaningfulness--Students View the Curriculum--Personality Assessment and Description of the Students' Backgrounds--Interaction Between Personality and the Curriculum

DIFFERENCES BETWEEN DIFFERENT LIVING GROUPS

VII. Personality Differences and Residential Choice 294

Anticipation of Improvement in Social Life--Reliance on Peers for Guidance--Definition and Urgency of Development Tasks--Problems of Freshman Dormitories

The Fraternity Men--Commonalities of Interests and Aspirations--Backgrounds of Fraternity Men--Diversity Within the Fraternity--Diversity Regarding Autonomy--Diversity Regarding Socio-Economic Status--The Inheritors-- The "Non-Inheritors"--Other Areas of Diversity--

VII. (Continued)

Dysfunctional Aspects of Fraternity Life--Agressive and Regressive Behavior--Attitudes of Social Superiority and Reaction to Lowered Self-Esteem--Atmosphere Favorable to Heavy Drinking--Functional Aspects of Fraternity Life--Assistance in Transition to University Life--Protection Against Feelings of Disintegration--Assistance in Achieving Heterosexuality --Environment Conducive to Relaxation, Dependency and Helpfulness--Informal Training in Leadership

The Eating Club Men--Characteristics of the Club Men--Feelings of Disappointment as Freshmen--Diversity of Backgrounds and Feelings of Social Inadequacy--Intellectual and Occupational Interests--Moderation in Social Activities and Academics--Interest in Intellectual and Service Activities--Inclination to Change During College --Advantages of the Eating Club--Disadvantages of Eating Clubs--The Unaffiliated

The Off-Campus Men--Diversity Among Off-Campus Men--Characteristics of the Men--Intellectual Interests and Feelings of Alienation--Choice of Occupation, Independence and Unconventionality--Relationships with Parents

The Dorm Men--Values and Interests of the Dorm Men--Characteristics of the Dorm Men--Family Backgrounds--Values and Self-Concept as Workers --Tendency to Value Time, Money and Orderliness --Problems in Social Relationships

Conclusions and Recommendations--Diversity and Flexibility--Suggestions About Student Sub-Groups--Overseas Campuses--Conclusion

Appendix: List of Tables 371

THE OCCUPATIONAL CHOICE

VIII. Careers: Choice, Chance, and Inertia 373

Methods of Data Collection--Results--Probable Occupations--Post-Graduate Status --Freshman Choice and Post-Graduate Status --Freshman Career Interests and the Graduate School Program--Cumulative Grade Point Average

VIII. (Continued)

--The Strong Vocational Interest Blank--Measured Interest of Men in Law, Medicine and Engineering

Probable Occupation and Probable Major of Women Students--Post-Graduate Status--Graduate Programs--Cumulative GPA--Measured Interest

Discussion--Presumed Freedom and Subtle Coercion--The Examined Life Versus Life by Examination--Personal Search and the Search for the Personal--Conclusion

Appendix: Pattern Analysis of the Strong for Individuals with Different Probable Future Occupations 417

DEFENSE AND IMPULSE IN DEVELOPMENT

IX. Congruence and Developmental Changes in Authoritarianism in College Students 422

Methodological Issues in Studying Student Change--Procedure

Factors Associated with Change--Socio-Cultural Background--Scholastic Aptitude--Related Personality Characteristics--College Experience--College Residence--The Major--Change and the Nature of Authoritarianism

Consequences of Change--Senior Retest Personality-Value Measures--Changes in the Dimensions of Authoritarianism

A "Purified" Change Group--Major, Housing and Aptitude--Related Personality Characteristics--Educational Orientation and Values

Summary and Implications--Congruence Hypothesis--Cognition and Impulse in Authoritarianim

Appendix: OPI Authoritarian Subscales (Experimental Form I) 460

Conventionalism--Authoritarian Submission--Distrust and Cynicism--Power and Toughness--Punitive Moralism--Puritanical Sex--Dogmatism--Anti-Intellectualism--Anti-Ambiguity--Religious Fundamentalism

References

X. Drinking and Personality 472

The "Personality Hypothesis"--The Literature --Background of the Present Study--Method

Results--Attitudes Toward Drinking and Toward Alcoholism in Relation to Personality and to Drinking Behavior--Drinking Behavior and Personality--Change in College: Attitudes and Behavior

Discussion--Practical Considerations-- Implications for Future Research

XI. Students Who Seek Psychiatric Help 510

The Problem--The Setting--The Data--Sources of Referral--Sex and Class--Marital Status--Age Distribution--Place of Residence

Parents--Age Distribution: Fathers and Mothers --Parents' Occupations

Siblings--Majors--Work--Other Financial Resources--Grades--Previous Counseling and Psychotherapy--Drop Outs--Religion--Entering Complaints--In Patients--Improvement--Personality Characteristics of Benefited and Not Benefited Patients--Counseling Center Data--Outcomes--Qualitative Data: An Attempt at Synthesis

Mr. A--Mr. B--Miss R--Miss Z

The Non-Patients--Major Syndromes--Brief Summary

Appendix: Occupational Code 568

ACTIVIST STUDENTS AND THEIR SUPPORTERS

XII. Personality Characteristics of Students Arrested During the Berkeley Sit-In of 1964 569

A Brief History of the Free Speech Movement (FSM)--Some Implications--Characteristics of the Students Who Were Arrested--Personality Inventory Data--Comments--Academic Measures--Attitudes and Behavior--Further Implications--An Individual Case

XIII. The 1966 Student Body President Elections at Stanford 600

Campaign Issues--Procedure--Results--Discussion

LITERATURE REVIEW

XIV. Review and Discussion of the Literature on Personality Development During College 606

Definition of Personality--Types of Studies--Theory--Research Using the Case Study Method--Studies of Change in Personality Dispositions--Studies of Change in Attitudes and Values

Appendix: Bibliography 624

RECOMMENDATIONS

XV. Recommendations for Policy and Philosophy 631

What Are Colleges For--Obstacles to Education for Individual Development--Differences Among Students--Lecture vs. Discussion-Oriented Students--Differences in Personality--A New Structuring of the Educational Career in College--Expansion of the Faculty--Strengthening the Freshman Year--Facilitating More Meaningful Peer Relations--Different Ways of Impulse Control--Need for Attention to Occupational and Marital Choice--Use and Abuse of Psychology--An Experiment with Teachers--Summary

Analytic Table of Contents 660